



## **Arlington Zoning Board of Appeals**

**Date:** Tuesday, May 18, 2021  
**Time:** 7:30 PM  
**Location:** Conducted by remote participation  
**Additional Details:**

### **Agenda Items**

#### **Administrative Items**

##### **1. Remote Participation Details**

In accordance with the Governor's Order Suspending Certain Provisions of the Open Meeting Law, G. L. c. 30A, § 20 relating to the COVID-19 emergency, the Arlington Zoning Board of Appeals meetings shall be physically closed to the public to avoid group congregation until further notice. The meeting shall instead be held virtually using Zoom.

Please read Governor Baker's Executive Order Suspending Certain Provision of Open Meeting Law for more information regarding virtual public hearings and meetings: <https://www.mass.gov/doc/open-meeting-law-order-march-12-2020/download>

You are invited to a Zoom meeting.

When: May 18, 2021 07:30 PM Eastern Time (US and Canada)

Register in advance for this meeting:

<https://town-arlington-ma-us.zoom.us/join>

After registering, you will receive a confirmation email containing information about joining the meeting.

Meeting ID: 959 1718 3692

Find your local number: <https://town-arlington-ma-us.zoom.us/join>

Dial by Location: 1-646-876-9923 US (New York)

#### **Comprehensive Permits**

##### **2. 1165R Massachusetts Avenue (continuance from April 27, 2021)**

#### **Meeting Adjourn**



## **Town of Arlington, Massachusetts**

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## Town of Arlington, Massachusetts

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### 1165R Massachusetts Avenue (continuance from April 27, 2021)

#### Summary:

#### ATTACHMENTS:

Type	File Name	Description
▢ Reference Material	13990-1165R_Mass_Ave_Apts-Comment_Response_Letter_2021-04-30.pdf	13990-1165R Mass Ave Apts-Comment Response Letter_2021-04-30
▢ Reference Material	13990-1165R_Mass_Ave_Apts-TIR-Rev3_2021-04-30.pdf	13990-1165R Mass Ave Apts-TIR-Rev3_2021-04-30
▢ Reference Material	13990-1165R_Mass_Ave_Apts-TIR-Rev3_2021-04-30-Appendix.pdf	13990-1165R Mass Ave Apts-TIR-Rev3_2021-04-30-Appendix
▢ Reference Material	W191330-CVL-7-C-301-Site.pdf	W191330-CVL-7-C-301-Site
▢ Reference Material	Letter_to_Christian_Klein_re_Traffic_Issues_-_Spaulding.pdf	Letter to Christian Klein re Traffic Issues - Spaulding

## MEMORANDUM

**TO:** Jennifer Raitt  
Director of Planning and Community Development  
Town of Arlington

**FROM:** Bryan Zimolka, PE, ENV SP

**DATE:** April 30, 2021

**RE:** 1165R Mass Ave Apartments – Traffic Peer Review Comment Responses  
Nitsch Project #13990

Dear Ms. Raitt:

Nitsch Engineering (Nitsch) has reviewed the Traffic Peer Review letter from BETA Group, Inc, dated April 5, 2021. Having met with BETA to discuss the comments, Nitsch offers the following comment responses, which reflect the revisions that have been made to the Traffic Impact Report (TIR). Please see the attached TIR.

### Site Access, Circulation, and Parking

- T1. Clarify how [the driveway wayfinding] signs will be implemented. Site Plans do not propose any changes for the Massachusetts Avenue driveway.*
- R1.** The wayfinding signage has been included in the revised Site Plan package. See attached.
- T1a. Revised Site Plan package was not provided for review.*
- R1a. The revised Site Layout Plan, dated April 13, 2021, has been attached to this comment response letter for review.**
- T2. The Site Plan shows DO NOT ENTER markings for the Ryder Street Driveway, suggesting a one-way "Exit Only" condition. This is not replicated on Architectural Plans.*
- R2.** The Architectural Plans depict design within the building and does not represent access to the site. The Site Plan depicts everything on-site, including access signage and markings, outside the building footprint. Therefore, it is not expected that access will be replicated on the Architectural Plans. See comment response R1.
- T2a. Updated Site Plans were not provided for review. Verify one-way or two-way configuration of the Ryder Street driveway.*
- R2a. The revised Site Layout Plan, dated April 13, 2021, has been attached to this comment response letter for review. The plan indicates egress-only at the Ryder Street driveway and restricted tenant egress at the Massachusetts Avenue West Driveway via regulatory signage and pavement markings.**
- T3. Garage parking aisles appear to be less than the required 24-foot width in some instances.*
- R3.** The developer has applied for a waiver from the Town requesting that aisle width be reduced to 23.5 feet for two-way traffic.



*T3a. The vehicle maneuver drawings suggest vehicles will strike support columns or walls, and will likely require vehicles to swing into adjacent parking spaces to adequately make a parking maneuver. A waiver to reduce aisle width is not recommended. Recommend maximizing the aisle width to accommodate multiple point turns to access parking without striking other vehicles, columns, or walls.*

**R3a. The revised Garage Vehicle Turning Exhibit dated April 29, 2021, has been attached to this comment response letter for review. Two parking spaces have been removed from the previous plan, and compact spaces have been designated to allow for unobstructed access into parking stalls. Additionally, Building Floor Plans, dated April 22, 2021, have been attached to this comment letter and show all aisle widths a minimum of 24 feet wide. As shown, the cars can accommodate multiple point turns to access parking without striking other vehicles, columns, or walls.**

*T4. Clarify that vehicles can maneuver within the parking garages, including usage of the ramp and maneuverability for parking stalls closest to the entrance at Building 4.*

*R4. The turning maneuvers plans have been included in the Architectural Plans which shows turning maneuver paths for the ramp and parking stalls for the parking garages. See attached.*

*T4a. See Response T3. Turning maneuver drawings suggest vehicles will strike support columns or walls, and will likely require vehicles to swing into adjacent parking spaces to adequately make a parking maneuver. The tight garage will require multiple point turning maneuvers to safely access a space. This is more severe for spaces adjacent to end walls as shown on the turning sketches.*

**R4a. See response 3a.**

*T5. Clarify whether parking garage will be gated and how access will be managed for tenants and Workbar tenants.*

*R5. The parking garage is not intended to be gated. Access will be managed by an on-site property manager. It is anticipated that all parking spaces will be numbered and that all Workbar tenants and residents will have a form of identification (such as a parking sticker or tag) designating reserved and non-reserved spaces within the garage. Resident parking spaces will be leased at market rates.*

*T5a. This practice will discourage some residents from owning a vehicle, thereby reducing the parking demand. Denote space numbering on the Site Plans.*

**R5a. The parking space numbers have be denoted on the attached Building Floor Plans.**

*T6. Clarify whether garage parking will be deeded per unit.*

*R6. The parking spaces will not be deeded per unit.*

*T6a. See Response T5. No further response required.*

*T7. Clarify which spaces will be designed for Workbar tenants. Given the tight maneuvering spaces within the garages, these spaces should be accessible for higher turnover activity.*

*R7. The designated Workbar spaces will be located closest to entry of the garage.*

*T7a. See Response T5. Denote space numbering and designated Workbar spaces on the Site Plans.*

**R7a. The Workbar parking spaces and numbers have be denoted on the attached Building Floor Plans, drawing A004.**

*T8. While peak Workbar activity is expected during normal business hours, it is noted that Workbar provides 24/7 access to members.*

*R8. The project incorporates a shared parking plan with the Workbar owner to provide 40 Workbar parking spaces during weekday work hours and 10 Workbar parking spaces during nights and weekends in the parking garage.*

*T8a. No response required.*

*T9. One accessible parking space is provided per the Site Plans within the "Short Term" parking area. This is not represented in the Architectural Plans. Zero accessible spaces are provided in the parking garages. Confirm the adequacy of the provided accessible spaces and define adequate accessible routes to both residential and the Workbar.*

*R9. The "Short Term" parking space is located outside the building, so it is represented on the Site Plans. The architectural plans show accessible parking spaces within the garage. See attached.*

*T9a. There are two attached interior garage plans. Both show a different parking configuration. One displays the location of accessible spaces, and the other plan shows vehicle turning paths with zero accessible spaces. BETA recommends the Applicant team coordinate and provide a consistent Site Plan.*

*Building 4 is shown as providing two accessible spaces on each level (4 total) adjacent to the entry to Building 1 and a bank of elevators.*

*Building 2 is shown to have 1 accessible space adjacent to an elevator. This is acceptable, but will require an awkward move to exit the space which may not be possible/easy depending on the physical restrictions of the driver.*

*The exterior Site Plan shows one accessible space within the Short Term Parking area between Building 1 and Building 4. This is acceptable.*

**R9a. The Garage Vehicle Turning Exhibit and Building Floor Plans have been revised to be consistent with each other and to show the accessible designated parking spaces. The Garage Vehicle Turning exhibit also shows the vehicle turn into the accessible space in Building 2 next to the elevator.**

## Traffic Impact Report Review

### Study Area

*T10. Forest Street is classified as a collector roadway.*

*R10. The classification has been updated in the TIR.*

*T10a. Issue resolved.*

*T11. The intersection of Massachusetts Avenue at Appleton Street and Appleton Place provides a pedestrian activated traffic signal that operates under “flash” when not activated and steady “yellow/red” with “Walk/Don’t Walk” when activated. Per section 4E.06 of the MUTCD, pedestrian signal heads shall not be displayed when the vehicular traffic control signal is being operated in the flashing mode.*

R11. As described in Section 2.2 of the revised TIR, Nitsch understands the signal provides a pedestrian activated traffic signal that operates under “flash” when not activated and steady “yellow/red” with “Walk/Don’t Walk” when activated. The intersection effectively operates as an unsignalized intersection. Although the traffic signal does not meet current federal regulations stated in the Manual of Uniform Traffic Control Devices (MUTCD), there is no current plan by the Town to revise the traffic signal.

*T11a. No response required. It should be noted that the Arlington Select Board has convened a design review committee to study and make recommendations at this intersection.*

### **Pedestrian and Bicycle Facilities**

*T12. Recommend the Applicant summarize the condition of nearby pedestrian and bicycle facilities and specify if improvements are required to safely accommodate added non-motorized traffic to/from the Site.*

R12. Section 2.1 of the initial TIR identifies pedestrian and bicycle facilities and summarizes the condition along each roadway. Specifically, the sidewalks to be used as a pedestrian path to the site, which include Massachusetts Avenue, Forest Street, and Ryder Street, are all in good to fair condition. All other bicycle facilities, including the Minuteman Commuter Bikeway and the Massachusetts Avenue bicycle pavement also appear to be in good condition.

*T12a. See Response T28.*

### **Traffic Count Data**

*T13. The evening peak hour ATR volumes for Massachusetts Avenue could not be validated and appear low. Review and revise accordingly.*

R13. The ATR volumes presented in the report have been reviewed and verified that they match the data collection.

*T13a. Comment stands. The data suggests a peak hour for Mass Ave of 5:00-6:00 PM with a volume of 1,086 (seasonally adjusted per the TIR) with 56% Eastbound.*

**R13a. The ATR volumes have been recalculated using a 3% seasonal adjustment increase. The ADT was calculated to be 13,127 vehicles per day; the Weekday morning peak hour (7:30am-8:30am) was calculated to be 1,051 vehicles per hour; and the Weekday evening peak hour (5:00pm-6:00pm) was calculated to be 1,084 vehicles per hour. The calculations are included in Appendix A of the revised TIR.**

*T14. Backup ATR volume sheets for Burton Road show zero volume over the course of the day. Review and provided updated sheets as appropriate.*

R14. See the attached revised ATR volume sheets for Burton Road that have been included in Appendix A of the revised TIR.

*T14a. ATR volume sheets were provided. No further comment.*

## Parking

*T15. It is generally assumed that the parking assessment was conducted in 2020.*

R15. That is correct. The parking assessment year has been identified in Section 3.3 of the revised TIR.

*T15a. Section 3.3 does not appear to have been updated accordingly. This is not a detrimental issue.*

**R15a. The count dates in Section 3.3 now indicate the year to be 2020.**

*T16. Backup information for the parking assessment was not provided in the Appendix.*

R16. Further backup information has been provided in Appendix C of the revised TIR.

*T16a. Backup provided. The peak period for the existing parking lot occurs during the lunch hour. No further comment.*

*T17. Clarify the occupancy of the Mill Building Office Space. Existing Site Plans show the Mill Buildings to be larger than 17,000 square feet. Should the building not be fully utilized, the parking demand would be lower, suggesting a higher proportion of Workbar usage.*

R17. Through discussions with the project owner, it has been determined that the approximate 17,000 square-foot office space is fully occupied. Therefore, the parking demand calculated for the Workbar is still valid.

*T17a. Revised TIR and response does not adequately address original comment. Occupied space of the Mill Building and Workbar should be identified. Workbar parking demand can be estimated as the percentage of Workbar occupied space compared to total occupied space utilizing the existing parking area. This derivation of site specific parking data can be assumed to be more representative of the site than calculations using ITE rates and mode share data. Occupancy data should match the time period when parking utilization data was collected.*

**R17a. The project team reevaluated the parking demand per the methodology noted above. We were able to receive the building occupancy data from the Town Assessor's database, which is included in Appendix I of the revised TIR. The approximate 17,000 square feet shown on the ALTA survey represents the building footing area. The "Mill Building," which comprises four sub-buildings, totals 43,307 square feet of gross floor area. However, the data indicates that only 24,545 square feet of gross floor area was occupied. The Workbar comprised 11,670 square feet of occupied gross floor area. Therefore, the occupied "Mill Building" area represents 68% of the site utilization and the Workbar represents 32% of the site utilization. This results in an increased parking demand for the "Mill Building" and a reduced parking demand for the Workbar. The previous calculations indicated the Workbar parking demand to be 23 vehicles, and the new calculations indicate the demand to be 17 vehicles.**

*T18. The text and footnote on page 16 of the TIR references Trip Generation, 10<sup>th</sup> Edition instead of Parking Generation, 5<sup>th</sup> Edition.*

R18. This reference has been updated in the revised TIR.

*T18a. Issue resolved.*

*T19. The parking observations [at the comparable housing developments] were conducted at different times on different days. The Legacy at Arlington Place (lowest ratio, 0.34) was conducted on a Saturday*

*throughout the morning and mid-day hours, while the Arlington 360 (highest ratio, 0.76) was conducted in the mid-day hours on a weekday. The ITE Parking Generation rate for bedrooms is 0.75 on weekdays and 0.77 on weekends. This is more consistent with that observed at the Arlington 360 complex.*

R19. The ITE Parking Generation rate is an average based on national studies and, therefore, should be used only as a guideline. To understand the local parking utilization for this specific use, a detailed parking study was deemed necessary. Therefore, the average parking utilization of 0.55 spaces per bedroom calculated from all three comparable housing developments (The Legacy at Arlington Center, Brigham Square Apartments, and Arlington 360) was used to justify the parking demand at the 1165R Mass Ave Apartments development. The following is a summary of when we collected applicable count data.

- Brigham Square Apartments at 30 Mill Street on Wednesday, January 29, 2020 from 6:00 AM to 8:00 AM and 12:00 to 2:00 PM, on Thursday, January 30, 2020 from 6:00 PM to 8:00 PM, and on Saturday, February 1, 2020 from 9:00 AM to 11:00 AM;
- Arlington 360 at 4205 Symmes Circle on Thursday, January 30, 2020 from 12:00 PM to 2:00 PM; and
- The Legacy at Arlington Center at 438 Massachusetts Avenue on Saturday, February 1, 2020 from 9:00 AM to 2:00 PM.

To obtain the peak parking demand at the other developments in addition to our own on-site observations, the management companies were contacted to obtain parking information, including the total number of spaces provided and the number of spaces reserved. As shown in Table 4 of the TIR, the Brigham Square Apartments is most representative of the proposed development, as it is similarly located in proximity to Massachusetts Avenue and the Minutemen Commuter Bikeway and has a similar number of bedrooms. Although the parking utilization for the Brigham Square Apartments is also directly in line with the average, it was necessary to show that we studied other developments as well.

T19a. *Further clarification is necessary regarding BETA's comment, along with additional commentary based on revised TIR and Appendix.*

1. *Utilization rates collected at different times of day do not adequately predict peak parking utilization. A meaningful average cannot be calculated from data collected at different times of day.*
2. *Times of day for Arlington 360 and The Legacy at Arlington Center do not match backup materials, which state that parking lot security restrictions prevented collection of complete counts. Clarify how peak utilization rates were determined for these sites – was peak utilization manually confirmed, or provided by facility management? What time of day was said utilization collected?*
3. *Table 4 is included in a section of the TIR discussing mid-day parking demand in order to develop a conclusion on the relationship between mid-day residential parking demand and the need to provide dedicated spaces for Workbar tenants. As such, the summary should review data from comparable sites during the mid-day period. Mid-day data is provided for Brigham Square apartments, which shows a mid-day peak of 71 spaces occupied, for a rate of 0.61 spaces/unit or 0.40 spaces/bedroom.*
4. *See response T32 for further discussion on peak residential parking demand.*

**R19a.** To address the parking concerns, the team took an additional three-step process to confirm the parking utilizations used in the previous TIR. Knowing that we were not able to conduct individual counts at Arlington 360, we received updated parking utilization data from Greystar, the building's management company. The data, included in Appendix C, is consistent with our initial findings in February 2020.

To obtain the time-of-day parking utilization for the Legacy, the management company was able to have the parking counts recounted internally for the following dates and times:

- Saturday, April 17, 2021 from 9:00am-11:00am
- Tuesday, April 20, 2021 from 6:00am-8:00am, 12:00pm-2:00pm, 6:00pm-8:00pm, and 11:00pm-1:00am (Wednesday)

The information from Legacy was used to obtain the peak parking utilization as well as the utilization reduction during the Weekday mid-day period.

To confirm the peak utilization for the Brigham Square Apartments from the previous TIR, we conducted an additional night count on Tuesday, April 20, 2021 from 11:00pm-1:00am (Wednesday). As expected, the peak utilization obtained from the Weekday morning counts represents the peak throughout the day. The Weekday night counts were slightly less than the Weekday morning, so the peak utilization used in the previous calculations was used for the revised calculations.

As a result of the new data collection, it was found that the peak utilization for all the developments is consistent with the data from February 2020:

- Arlington 360: 0.73 spaces/bedroom
- Brigham Square Apartments: 0.55 spaces/bedroom
- The Legacy: 0.40 spaces/bedroom

This yields an average peak utilization of 0.56 spaces/bedroom. Therefore, this utilization was used to obtain the anticipated peak demand for the 1165R Mass Ave Apartments; 105 vehicles. The previous report calculated 103 vehicles.

To obtain the parking utilization reduction during the Weekday mid-day and Saturday mid-morning, we now used the two new sources for time-of-day data (The Legacy and Brigham). We used the average of the new datasets and found the utilization reduction is consistent with the previous calculations; 18% reduction during the Weekday mid-day and 10% reduction during the Saturday mid-morning.

To calculate the total required spaces in combination with the Workbar, we used the same methodology as done for the previous TIR, except we used BETA's requirement for estimating the Workbar spaces. The 18% Weekday mid-day parking utilization reduction was applied to the number of required apartment spaces and added to the calculated Workbar parking demand, yielding a total parking demand of 103 vehicles (107 vehicles in previous report). During the Saturday mid-morning, the calculated parking demand based on a 10% reduction is 96 vehicles (95 vehicles in previous report). When adding the required 40 Workbar parking spaces during the Weekday mid-day to the apartments' demand, 126 parking spaces will be required. Adding the 10 Workbar parking spaces to the Saturday mid-morning demand, 104 parking spaces will be required. The revised parking garage layouts for Buildings 2 and 4 which provide 122 parking spaces in

**addition to the 12 surface parking spaces will be sufficient to meet the anticipated demand. Parking data calculations are provided in Appendix C.**

*T20. BETA generally concurs that parking demand would be lower with adequate connections to the commuter bikeway and the MBTA.*

R20. No response required.

*T20a. As noted in the Arlington Transportation Advisory Committee's memorandum dated March 11, 2021, the MBTA has proposed service cuts to the area which include reduced MBTA bus service along Massachusetts Avenue. This will increase the desire for on-site parking.*

**R20a. The service cuts are related to the pandemic. In Boston.com/news, there is an article from March 5, 2021 titled "MBTA reduction in service effective March 14 due to COVID". There is a Boston Globe article titled "Service will be cut due to pandemic," which was published on December 14, 2020. On March 29, 2021 Boston.com/news ran an article "MBTA moving to restore pandemic induced service cuts." As such, the cuts are inapplicable to this project as there will be approximately 18-24 months before completion, and MBTA service is expected to have returned to normal by then.**

#### **Safety Evaluation**

*T21. The TIR summarized crash data for 2018 and 2019, year which were not "closed" by MassDOT. This suggests that the data may not be complete. As of writing this letter, 2018 data is now finalized ("closed"). Typically, it is recommended to summarize the three most recent "closed" years.*

R21. Nitsch has reviewed and summarized "closed" crash data for the most recent three years for 2016 to 2018. The crash numbers and rates have been adjusted accordingly in the revised TIR and are considerably less than previously reported.

*T21a. The crash data updates are acceptable. No further comment.*

*T22. BETA ran crash summaries for the study area intersections and found crash totals to be inconsistent from those presented in the TIR. Crash data backup was not provided in the TIR Appendix for reference. Recommend providing backup in the Appendix to support the table.*

R22. Nitsch has found that the previous collected data has duplicate entries making the total number of crashes much higher than expected. As also mentioned in T21, the "closed" crash data was used in the revised TIR. There are 8 total number crashes presented in the revised TIR as compared to 34 as reported in the previous TIR. The new crash data, rates, and diagrams are presented in Appendix D of the revised TIR.

*T22a. The crash data updates are acceptable. No further comment.*

*T23. As noted in Comment T22, it is expected that the crash history for Forest Street at Ryder Street/Peirce Street is overstated and not representative of existing conditions. Reevaluate and revise as appropriate.*

R23. Nitsch has reviewed the crash rate for all intersections, including Forest Street at Ryder Street/Peirce Street, which was higher due to the duplicate crashes. Nitsch has corrected the crash rate from 1.59 to 0.13 crashes per MEV.

*T23a. The crash data updates are acceptable. No further comment.*

*T24. The notes for Table 6 of the TIR are not representative of the text and data presented in the TIR and Table.*

R24. A total of 8 crashes were reported within the study area from 2016 to 2018. There were no reported crashes at the intersections of Massachusetts Avenue and Quinn Road, Mirak Innovation Park West Driveway and Quinn Access Road, and Ryder Street and Mirak Innovation Park Ryder Street Driveway during the study period. In terms of severity, one (1) crash in the study area reported personal injury, four (4) crashes are reported as property damage only, and there were no crashes with fatalities. Angle and sideswipe crashes were the most frequent type of crash with a total of 3 crashes each, and of the remaining crashes, 2 were rear-end crash. No crashes involving pedestrians or bicycles were reported. Twenty-five percent of all crashes in the study area occurred during peak hours, and 25% of all crashes occurred under wet/icy conditions. Nitsch also updated the Table 6 notes that used to say, "Based on 3-year crash history from MassDOT, 2014-2016" to "Based on 3-year crash history from MassDOT, 2016-2018" and "Based on latest MassDOT crash data queried June 2018" to "Based on latest MassDOT crash data website."

*T24a. The crash data updates are acceptable. BETA notes that the Table 6 Note "c" has not been fully updated in accordance with the response to comment. It still references "June 2018" which is not reasonable for this project.*

**R24a. The reference has been changed.**

### **Signal Warrant Analysis**

*T25. While the Project may not significantly increase traffic volumes through these intersections, activity will increase when accounting for increased vehicle, pedestrian, and bicycle travel to/from the Site. Recommend the Applicant offer safety related recommendations to improve conditions.*

R25. As noted in section 4.2 of the revised TIR, the Proponent recognizes safety is an issue through the study intersections. However, they do not intend to provide infrastructure improvements, as the project will not significantly impact the roadway network. Since the initial submission of the TIR in July 2020, the Town has been working with a traffic consultant to conduct a Road Safety Audit to evaluate the intersections and determine the most appropriate mitigation measures.

*T25a. No response required*

### **Future No-Build Traffic Conditions**

*T26. Figure 5 (2025-No-Build Peak Hour Volumes) of the TIR was found to have misrepresented volumes for some turning movements. In one intersection, volumes decreased when compared to the existing conditions. These discrepancies are not expected to dramatically change the conclusions of the report.*

R26. After thorough review of both Figure 3 (2020 Existing Peak Hour Volume) and Figure 5 (2025 No-Build Peak Hour Volume), Nitsch found the discrepancy at the intersection of Peirce Street, Ryder Street, Forest Street, and Driveway, and we have rectified the volume. As noted, the changes are minor and do not significantly change the traffic analysis presented in the initial TIR.

*T26a. Figures updated. No further comment.*

### **Proposed Future Conditions**

*T27. Site access is to be provided via Quinn Road and the access road between Quinn Road and the site. Although these roadways exist today, they essentially serve as local access to abutting businesses,*



*including Mirak Chevrolet, DeVito Funeral Home, and service facilities for Mirak Chevrolet and Mirak Hyundai. The Mirak Chevrolet dealership has head-in parking along the building with direct entry from Quinn Road. Provide commentary on how additional site-generated traffic will impact access and operations to Mirak Chevrolet and DeVito Funeral Home, and whether additional measures are necessary to accommodate, restrict, and/or delineate parking along Quinn Road serving both abutting businesses.*

R27. Given the low volume of site-generated traffic, especially during the midday hours, access and operations for the abutting businesses will not be significantly impacted. During the weekday midday hours when the abutting businesses are expected to be at a peak, the new development is expected to generate on average 35 vehicles per hour, or approximately 1 vehicle every 2 minutes. This is not deemed to be a significant amount of traffic affecting access or operations on-site and off-site. Furthermore, adequate wayfinding signage will be provided directing Workbar vehicles to the designated parking areas, and residents will be under a contractual agreement stating that parking will be allowed only within the designated parking garages.

T27a. *Provide proposed signage and any recommended revitalization (repaving, striping, sidewalk, etc.) to Quinn Road and the surrounding driveways to reduce the amount of vehicle, pedestrian, and bicycle conflicts.*

**R27a. See response R28a.**

T28. *See Comment T12. Off-site multimodal improvements should be considered to promote connectivity to Mass Ave and to the Minuteman Commuter Bikeway.*

R28. Adequate connections to the pedestrian and bicycle pathways currently exist. Further, sufficient on-site bicycle parking is provided at the project, and a robust Transportation Demand Management Program will be implemented to promote more use of bicycles and help reduce the use of single occupancy vehicles for short distance commutes.

T28a. *We disagree with the assessment that “adequate” connections currently exist. The Mirak Innovation Park West Driveway and Quinn Road are effectively parking lot driveways and do not provide any pedestrian or bicycle accommodations, which would require pedestrians and bicycles to travel with traffic and motor vehicle parking maneuvers. The Mirak Innovation Park West Driveway features a utility pole, located within the travel way. This pole should be relocated. Ryder Street also serves on-street parking and off-street parking for abutting uses. A short section of sidewalk is provided south of the Site Driveway, but no accommodation is provided north to the bikeway. This would also require pedestrians and bicycles to walk/ride in the travel way and avoid parking maneuvers. As Ryder Street is a private way south of the Project to Massachusetts Avenue, consider repaving or supporting maintenance efforts to improve conditions along this roadway.*

**R28a. The Mirak Innovation Park entrance on Massachusetts Avenue (hereinafter referred to as the “Massachusetts Avenue Entrance”) has been used as one of the ingress and egress points from the Property for more than fifty years. The Massachusetts Avenue Entrance is too narrow (20’ wide) and too steep (grades up to 12%) to provide pedestrian or bicycle access to the Property. Moreover, the Massachusetts Avenue Entrance is encumbered by a recorded easement, which grants the abutting properties rights of ingress and egress, preventing the narrowing of the easement for installation of a sidewalk even if such an installation were feasible.**

As confirmed by the Town Engineer, Quinn Road is, in fact, a public way and is one of three existing vehicular connections to the Property. The Quinn Road connector driveway is owned by others, but the proponent has access rights from the Property to the Quinn Road.

The Applicant has proposed three adequate connections for vehicle traffic to the Property. The Massachusetts Avenue Entrance would be ingress only for residents, Quinn Road would be used for ingress and egress, and Ryder Street access to the Property would be egress-only for residents. The Massachusetts Avenue Entrance and the Quinn Road connector driveway are both vehicle driveways and not well suited for pedestrians and bicycles. On the other hand, the Ryder Street connector is proposed to be improved with new accessible pedestrian and bicycle pathways connecting to the existing sidewalk at Ryder Street, with additional improvements proposed by the Proponent, that connects to larger sidewalk networks at Forest Street, Massachusetts Avenue, and beyond.

Based upon multiple meetings with the neighborhood group, the Applicant is proposing extensive improvements to the south of the Ryder Street exit of the Property, including: (a) repaving the existing paved surface from the Ryder Street exit of the Property to Forest Street; (b) reconstructing the existing sidewalk from the Ryder Street exit of the Property to Forest Street to create an accessible connection, including new crosswalks and wheel chair ramps at the 9 Ryder Street driveway curb cut; (c) the insertion of a new crosswalk and wheelchair ramps at Ryder and Forest Streets; and (d) a speed table on Ryder Street at the intersection with the Ryder Street exit driveway.

The Applicant does not have any rights with respect to the private way on Ryder Street from the Ryder Street exit to the Minuteman Commuter Bikeway. Any improvements to that segment of Ryder Street should be required of the abutting property owners at 15 Ryder Street, 33 Ryder Street, and the other commercial businesses that use the private right-of-way for vehicular access.

With respect to the utility pole within the Massachusetts Avenue Entrance, the Applicant investigated relocating the pole and discussed relocation with the utility company. Power service for the new residential project will be provided from Ryder Street, not via the Massachusetts Avenue Entrance. The existing utility pole on the Massachusetts Avenue Entrance is owned by the utility company and provides power and data services to the abutting property owners. The relocation is not feasible for the following reasons: (a) the pole would need to be moved by the utility company and located on another property owner's property; (b) relocation of the pole would trigger the need to move connecting utility poles servicing businesses on the Quinn Road connector and the Massachusetts Avenue Entrance, as well as relocation of poles on Massachusetts Avenue to meet current utility company standard; and (c) the costs associated with the reworking and relocation of the poles would be substantial, would not address the power needs for the project, would render the project economically unfeasible if imposed on the project, and presumably would not be a cost the abutters would consider incurring.

- T29. Backup calculations for Trip Generation were not appended for reference. Calculations for the Office use appear to utilize the “Peak Hour of Generator” which generates a larger number of trips than the “Peak Hour of Adjacent Street.” This represents a larger existing credit for proposed trips; recommend using “Peak Hour of Adjacent Street”. The calculations for housing trip generation could not be verified. Provide calculation backup for review.*
- R29. The trip generation calculations for the office were calculated using the “Peak Hour of the Adjacent Street.” The trip generation rates for LUC 710 – “General Office Building” are similar when comparing “Peak Hour of Generator” and “Peak Hour Adjacent Street.” Therefore, we see how there was a misunderstanding. The ITE trip generation worksheets are provided in Appendix F of the revised TIR.
- T29a. Review of the backup information shows the Applicant estimated the number of generated “Person” trips, which represents a larger number than the estimated “Vehicle” trips. This is expected as “Person” trips include all other modes in addition to driving, walking, bicycling, transit, etc. Since the Applicant’s Traffic Impact Report assumed a vehicle occupancy rate of 1.0 persons per vehicle, this methodology is conservative. No further comment.*
- T30. Suggest using Census Tract data for application of mode share to determine vehicle trips. Census data is more recent than the 2015 Master Plan and suggests a 7% increase in car trips when compared to the TIR.*
- R30. Nitsch has reviewed the 2019 Census Tract data as a source of overall mode share within the project region. However, an appropriate adjustment still has be made to account for the proximity to the Minuteman Bikeway and public transit. The Census Tract data and the project specific mode-share are as follows:

Mode	2015 Arlington Master Plan	Initial TIR	Census Tract 3566.01	Revised TIR
Car	72%	67%	74%	69%
Transit	17%	19%	21%	21%
Bike	2%	5%	1%	3%
Walk	3%	3%	2%	2%
Taxi/TNC	1%	1%	0%	1%
Work from Home	5%	5%	2%	4%

- T30a. The intention of the Census Tract information is to provide hyperlocal mode splits more consistent with the evaluated region/neighborhood. The Census Tract data should already represent the presence of the bike path and its effect on commuting to/from the MBTA station or other area uses. The Revised TIR decreased the Census Tract “Car” percentage by 5% and subsequently increased the Bike (2%), Taxi (1%), and Work From Home (2%) percentages. Increasing Taxi and Work From Home decrease the personal vehicle trips, but does not account for the “proximity of public transit and the bikeway.”*

*It should be noted that Census mode share data is based on the mode used for the longest distance on a trip. As a result, a trip where a resident uses their car to drive to Alewife and take the Red Line would be reported as a transit trip. Provide an assessment of this potential for increased car trips.*

- R30a. Although the methodology used in the previous TIR of applying a slight mode adjustment based on proximity to commuting accommodations (i.e., bike trails, public**

transit stops, etc.) is an acceptable means of estimating, the mode splits were recalculated to match the Census Tract 3566.01 data per BETA's required methodology.

An adjustment to the trip generation for the existing "Mill Building" was made based on the occupied gross floor area, as noted in R17a. This resulted in a larger credit taken for the existing use. Therefore, the net trip generation reported in the previous TIR is higher, thereby providing a more conservative analysis. However, the traffic capacity analysis was reconducted with the lower trip generation, and the results are presented in the revised TIR.

*T31. Clarify one-way or two-way operation of site driveways. See comments T1 and T2.*

R31. The future site access for tenants of the Workbar and apartments is as follows:

- Mirak Innovation Park west driveway will be ingress only;
- Ryder Street south driveway will be egress only; and
- Quinn Road will be two-way.

This is represented on the Site Access Diagram (Figure 6). Access and operations will remain as existing for the abutters.

*T31a. Recommend site access and circulation signage and markings be displayed on the Site Plan. Figure 6 shows two way "abutter site access" via the Mirak Innovation Park west driveway; clarify how resident access will be restricted while abutter access is allowed.*

**R31a. Signage will not be provided at the Massachusetts Avenue west driveway entrance as abutters will still have full access maintained. However, as shown on Figure 6 of the revised TIR and the Site Plan, wayfinding and regulatory signage will be placed at key locations to direct residents and Workbar tenants to the correct access/egress points. The existing monument ID sign at the end of the West Driveway (at Massachusetts Avenue) will be modified to display resident and Workbar entry only. Furthermore, upon signing a tenant lease agreement or Workbar membership, the user will be given a site circulation diagram along with documentation indicating that they will be penalized if the designated site circulation is not adhered to. An on-site transportation coordinator will be present and responsible for maintaining compliance.**

*T32. The 0.55 [parking] spaces per bedroom rate presented in Section 3.3 of the TIR does not definitely represent peak parking utilization of the three nearby complexes. Only one (Brigham Square Apartments) was counted at night, with the count ending at 8:00 PM. A count to determine peak parking utilization should be conducted during the late night or overnight hours. Recommend counting after 10:00 PM on a day other than Friday or Saturday. Demand rates should also consider if there are any vacant apartments at the comparable sites during the data collection period.*

R32. Brigham Square Apartments was the only complex that had attainable data during all count periods: weekday morning, midday, and evening, and Saturday mid-morning. In addition to our own on-site observations, the complex management companies provided the number of reserved and non-reserved spaces occupied on record. The apartment mix, peak utilization, and total parking lot spaces information obtained from the management companies was used to derive the project parking demand for a comparable use. The apartment complexes chosen for the study are ones of similar size and proximity to public transit. At the time of the counts, vacancy rates for the developments ranged from 0-3%.

*T32a. The intention of the comment relates to peak parking demand observed in the overnight hours when the majority of residents/tenants can be expected to be home and sleeping with vehicles parked on-site. As the residential component will be the primary land use, it will consume the most parking. It is expected that parking demand will be lower during the day as residents leave for their workplace. It is possible that the nearby sites were less utilized during the day but overfilled during the night time, suggesting a higher parking ratio for this development. It is essential to compare sites during the known peak utilization period.*

**R32a. See response 19a. New data was obtained from the Apartment complexes, including additional Weekday night counts (11:00pm-1:00am). As expected, the new data and counts are consistent with the data reported in the previous TIR.**

*T33. Assuming an ITE Parking Generation based on Dwelling Units, the estimated parking demand would be 170 parking spaces. This is more consistent with that of the zoning by-laws. The by-laws do allow for a reduction in parking, provided adequate measures are provided to reduce personal vehicle reliance.*

**R33.** ITE Parking Generation calculates demand ratios based on national studies for similar uses of similar size. However, it was determined by the project team that the zoning code and ITE over-represent what will be required for this site, which is why we conducted the robust parking utilization study. The study concluded that the maximum required parking for the development is 107 parking spaces. The proponent is seeking a waiver from the municipal standards for parking ratios.

*T33a. BETA concurs that utilizing similar local sites is an accepted industry practice for determining projected parking demand. See Response T32.*

**R33a. See responses R19a and R32a.**

*T34. Clarify the derivation of the 85% factor applied to weekday mid-day parking occupancy in Table 12.*

**R34.** Based on our own on-site observations in addition to the information provided by the property management companies, it was originally calculated that the weekday midday parking occupancy represented 85% of the peak occupancy. Upon further review of the data, a more accurate representation of the weekday midday occupancy is 82% of the peak occupancy. Therefore, the 82% now shown in Table 12 represents the percentage of peak occupancy during the weekday midday period. Parking occupancy calculations have been included in Appendix C of the revised TIR.

*T34a. The parking information obtained at the Brigham Square Apartments showed a peak weekday parking demand of 99 vehicles at 6:30 AM (65% of the 153-space parking lot). This was compared with the maximum weekend parking demand of 85 vehicles at 9:00 AM (46% of the 153-space parking lot) and the maximum weekday midday demand of 71 vehicles at 12:30 PM (56% of the 153-space parking lot). This found the weekday midday peak has 18% less demand, and the weekend has 9% less demand. than the larger weekday peak at 6:30 AM. At issue is whether the 99 vehicles in the early weekday morning accurately represents peak demand, see Response T32. It is expected that peak demand would be higher in the overnight hours. A peak parking demand of 65% seems unreasonable and suggests that the nearby apartment complex provides over 50 parking spaces that are unused. Peak parking rates should be reviewed for all three comparable sites to verify the relation between mid-day and peak demand.*

**R34a. See response R19a. New data was obtained for all three developments, and, as expected, the peak utilization is consistent with the data used in previous TIR.**

*T35. The peak parking rate for Arlington 360 was determined as 0.76 spaces per bedroom during a weekday mid-day. Application of this rate to the Project Site would result in a weekday mid-day demand of 142 spaces for residents alone, before considering the 40 spaces to be designated for Workbar tenants, which would result in a need for 182 parking spaces. Provide commentary clarifying why demand characteristics of the Project Site will differ from those of Arlington 360 or other comparable sites. Even at a rate of 0.55 spaces per bedroom during mid-day hours, the 103 space demand stated in the TIR plus the 40 spaces designated for Workbar results in a net deficit of 7 spaces.*

R35. As shown in Table 4 of the TIR, the Brigham Square Apartments is most representative of the proposed development, as it similarly located in proximity to Massachusetts Avenue and the Minutemen Commuter Bikeway and has a similar number of bedrooms. In addition, the Project parking garage will function the same as the Brigham Square Apartments garage; a shared lot with reserved and non-reserved parking. Therefore, utilizing the 0.55 spaces per bedroom would most accurately model the anticipated parking utilization for the 1165R Mass Ave Apartments. Note, the 0.55 spaces per bedroom is the calculated average rate for all apartment complexes but is also the exact rate calculated for the Brigham Square Apartments.

As noted in R34, 82% of the peak utilization (0.55 spaces per bedroom) represents the weekday midday utilization when Workbar is at its peak. Therefore, 84 reserved parking spaces would be necessary for the apartments during the weekday midday. With the additional 40 spaces reserved for the Workbar during the weekday midday hours, the maximum demand is calculated to be 124 parking spaces.

For the Saturday mid-day period, the parking lot occupancy is 91% of the peak utilization which represents 94 required spaces. However, to provide a conservative weekend assessment, we assumed the parking lot would be at its peak utilization for the residents, which would mean 103 parking spaces would be required for the apartments. With the additional 10 spaces reserved for the Workbar during the weekday nights and weekends, the maximum demand calculated would be 113 parking spaces.

Therefore the 135 proposed spaces would be sufficient to accommodate the anticipated demand from both uses. These calculations have been included in Appendix C of the revised TIR.

*T35a. Backup parking information suggests a parking study was only performed for the Brigham Square Apartments which recorded parking demand (parked vehicles) in half hour intervals during the above mentioned time periods. The other two apartment complexes could not be observed due to security reasons. The parking demand reported for these complexes were obtained from Management which includes one peak demand number. It is unclear when this peak demand actually occurred and what it includes. While it can be assumed that the Brigham Square Apartments are an adequate representation, it would be helpful to have adequate data for all three comparable sites. See Response T32.*

**R35a. See response 19a. New data was taken for all three developments, but, as noted, only time-of-day data was able to be obtained for the Brigham Square Apartments and The Legacy. Therefore, the peak utilization was calculated based on the average for all three developments; the utilization reduction during the mid-day and Saturday mid-morning was calculated based on the Brigham Square Apartments and The Legacy. The parking data is included in Appendix C of the revised TIR.**

*T36. A construction management plan should be provided for review.*

R36. A Construction Management Plan will be provided by the Project in later phases of project permitting.

*T36a. The Plan should be provided for Town and BETA review. It is important to consider the traffic impact of construction vehicles.*

**R36a. A Construction Management Plan will be provided for review and approval by the Town of Arlington prior to the commencement of construction.**

### **Traffic Operations**

*T37. Recommend [the critical gap time] calibrations stay consistent for all conditions (existing, no-build, and build) to accurately represent the change in delays and queues as a reflection of changing volume.*

R37. Nitsch has reviewed the Synchro analysis and updated the critical gap times where applicable.

*T37a. Issue resolved.*

*T38. Verify how the delays and LOS were combined for the five-legged intersections. It is expected that the delays were summed among common movements, though the reported values in Table 14, Table 15, and Table 16 do not match those reported in the Appendix. This is more specific to the morning peak hour analysis.*

R38. Given the limitations in the Synchro 10 traffic modelling software, a five-legged, unsignalized intersection is not possible to model as a single intersection. Therefore, the two five-legged intersections were each modeled as two smaller, separate intersections (nodes) and combined.

For each of the five-legged intersections, we determined a logical grouping to model the two nodes. At the intersection of Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway, we modeled Appleton Street and Appleton Place separately from the two legs of Massachusetts Avenue and the Commercial Driveway, with a short, imaginary roadway segment connecting them. Likewise, at the intersection of Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway, we modeled the west leg of Massachusetts Avenue, Forest Street, and Burton St separately from the east leg of Massachusetts Avenue and Mirak Innovation Park West Driveway, with a short roadway segment connecting them, mimicking the actual layout.

Each movement across the overall intersection requires a movement at one or both of the nodes. To calculate the average delay for each approach across the full intersection, we performed the following steps:

1. Multiply the average delay on Approach A from the Synchro output for the associated node by the number of vehicles on Approach A, which gives the total delay on Approach A attributable to movements at only that one node.
2. For the overall movements on Approach A that involve the other node, multiply the average delay on the associated approach at the other node by the number of vehicles making those movements from Approach A, which gives the total delay on Approach A attributable to movements at the other node.
3. Add the two total delay numbers together to get the total delay on Approach A through the full intersection.

4. Divide the total delay on Approach A through the full intersection by the number of vehicles on Approach A to get the average delay per vehicle on the approach.

The calculations are included in Appendix G of the revised TIR.

*T39a. BETA reviewed the above discussion and the calculation tables in the Appendix. The described methodology is acceptable. No further comment.*

*T39. The reported Operations Summary Tables were found to vary slightly from results presented in the Appendix. The discrepancies are unclear, but generally do not affect the conclusions as reported.*

R39. Nitsch has reviewed the discrepancies. These were the result of the five-legged calculation methodology explained in T38. The calculations to obtain the results are in Appendix G of the revised TIR.

*T39a. For all AM Peak Hour analysis conditions, the southbound Commercial Driveway at Mass Ave and Appleton Street should be reported as LOS A as there is no existing or proposed volume for this driveway during the AM Peak Hour.*

**R39a. The capacity analysis tables have been adjusted accordingly.**

*T40. There are two missing 2025 Build Analysis worksheets in the Appendix. Provide for reference.*

R40. The worksheets are included in Appendix G of the revised TIR.

*T40a. Worksheets were provided in Appendix H. No further comment.*

#### **General Comments**

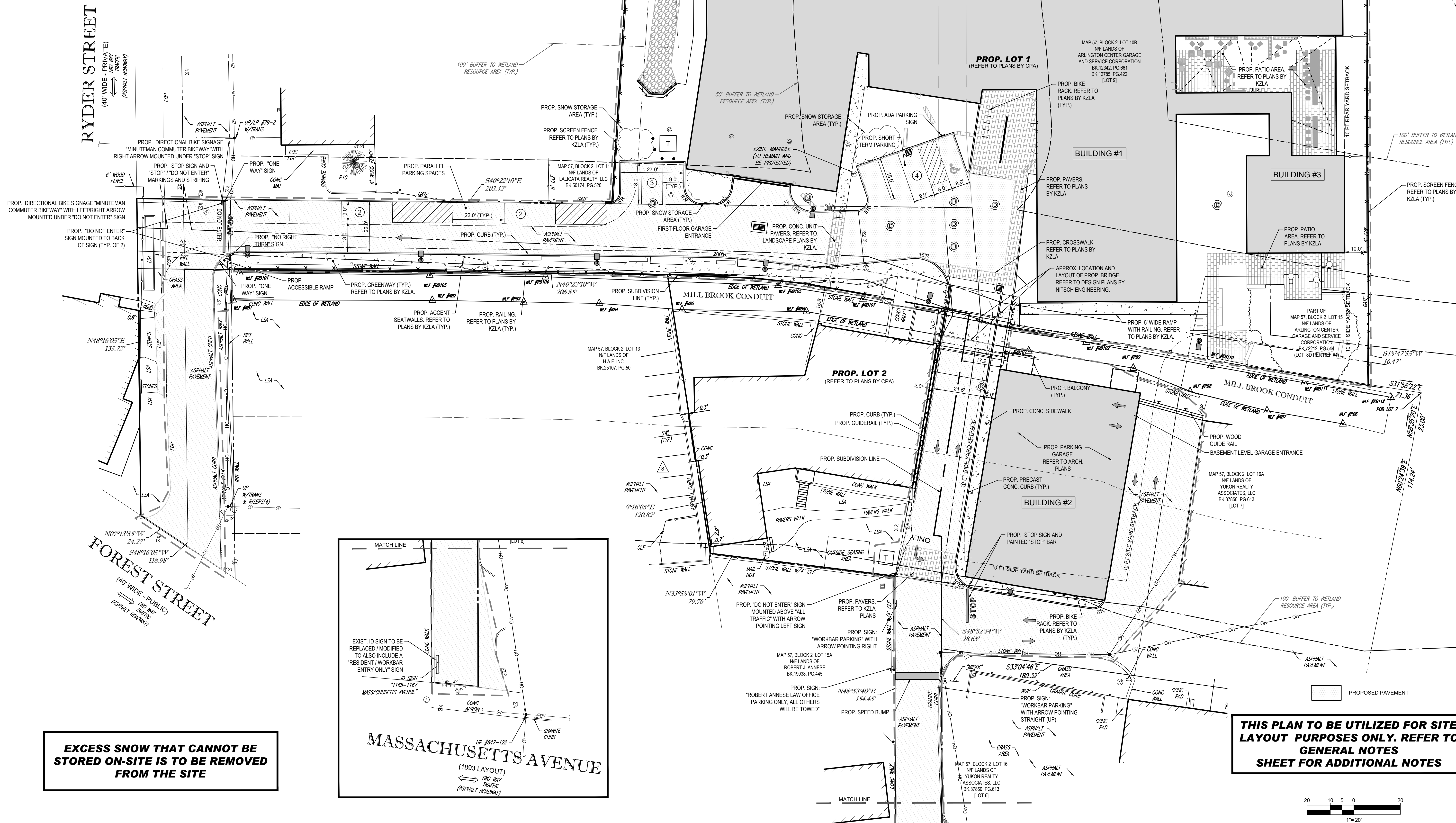
*T41. A sight distance evaluation should be provided.*

R41. As all site driveways are to remain at the existing locations, a sight distance evaluation was not deemed necessary for this report.

*T41. Use of existing roadways does not guarantee adequate sight distance. Existing sight distance should be evaluated. As part of the Site Design, explore methods to maximize sight lines.*

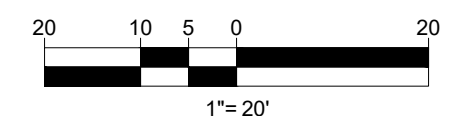
**R41a. A sight distance evaluation was conducted at each driveway. It was calculated that the stopping sight distance is adequate for both eastbound and westbound traffic at the Massachusetts Avenue driveway. Sight distance is limited to the west of the Ryder Street Driveway, therefore traffic calming measures are proposed by way of a speed table on Ryder Street at the driveway to reduce speed.**





EXCESS SNOW THAT CANNOT BE STORED ON-SITE IS TO BE REMOVED FROM THE SITE

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL NOTES



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SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

REVISIONS			
REV	DATE	COMMENT	DRAWN BY
1	3/10/20	REVISED BUILDING 2 & GRADING	BPB
2	06/15/20	SITE PLAN & GRADING	JMJ
3	07/15/20	CONSERVATION COMMISSION	AWP
4	08/21/20	CONSTRUCTION PHASING	AWP
5	10/05/20	ZBA SUBMITTAL PROGRESS SET	JMJ
6	04/01/21	ZBA COMMENT RESPONSE	RMM
7	04/13/21	UPDATED SIGNAGE	CFD

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PROJECT No.: W191330  
DRAWN BY: AWP  
CHECKED BY: JMJ  
DATE: 02/17/2020  
CAD LID: W191330-CVL-7-130 UNITS

PROPOSED SITE PLAN DOCUMENTS

FOR

1165R MASS MA PROPERTY LLC

PROPOSED RESIDENTIAL DEVELOPMENT  
1165R MASSACHUSETTS AVE.  
MIDDLESEX COUNTY  
TOWN OF ARLINGTON, MA  
MAP #57, BLOCK #2, LOT #10B  
AND PART OF LOT #15

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SHEET TITLE:

**SITE LAYOUT PLAN**

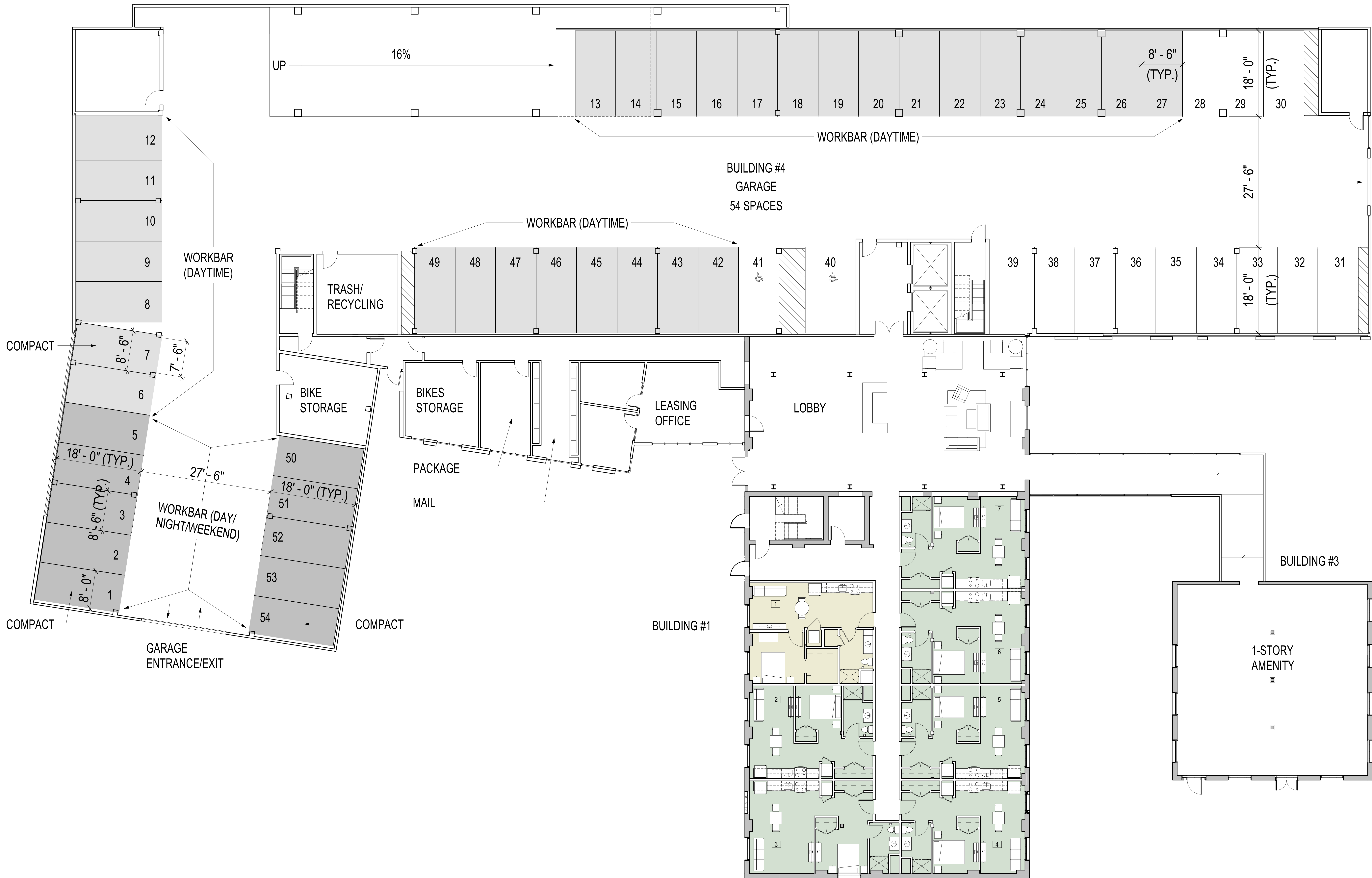
SHEET NUMBER:

**C-301**

REVISION 7 - 04/13/21



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4/29/2021 12:20:02 PM Michael Barker



2 Building #4 First Floor

REVISIONS	
1	
2	
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4	
5	DATE

DRAWING TITLE  
**Building #1, #3,  
#4 First Floor  
Plan**

DRAWING INFORMATION	
April 22, 2021	
DATE OF ISSUE	
MassHousing	
DESCRIPTION	
1/8" = 1'-0"	Michael Barker
SCALE	DRAWN BY
3426.00	[3426.rvt]
PROJECT #	FILE NAME

DRAWING NUMBER  
**A004**

PROJECT NAME

# Redevelopment of 1165R Massachusetts Avenue

1165R Massachusetts Avenue,  
Arlington, MA 02476

**CLIENT**

**1165R Mass MA  
Property LLC**

c/o Spaulding & Slye Investments  
One Post Office Square  
26th Floor  
Boston, MA 02109

## PROJECT TEAM

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**Landscape Architect**  
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## REVISIONS

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DATE \_\_\_\_\_

**DRAWING TITLE**

## Building #1, #4 Second Floor Plan

### DRAWING INFORMATION

April 22, 2021	
DATE OF ISSUE	
MassHousing	
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SCALE	DRAWN BY
3426.00	[3426.rvt]
PROJECT #	FILE NAME

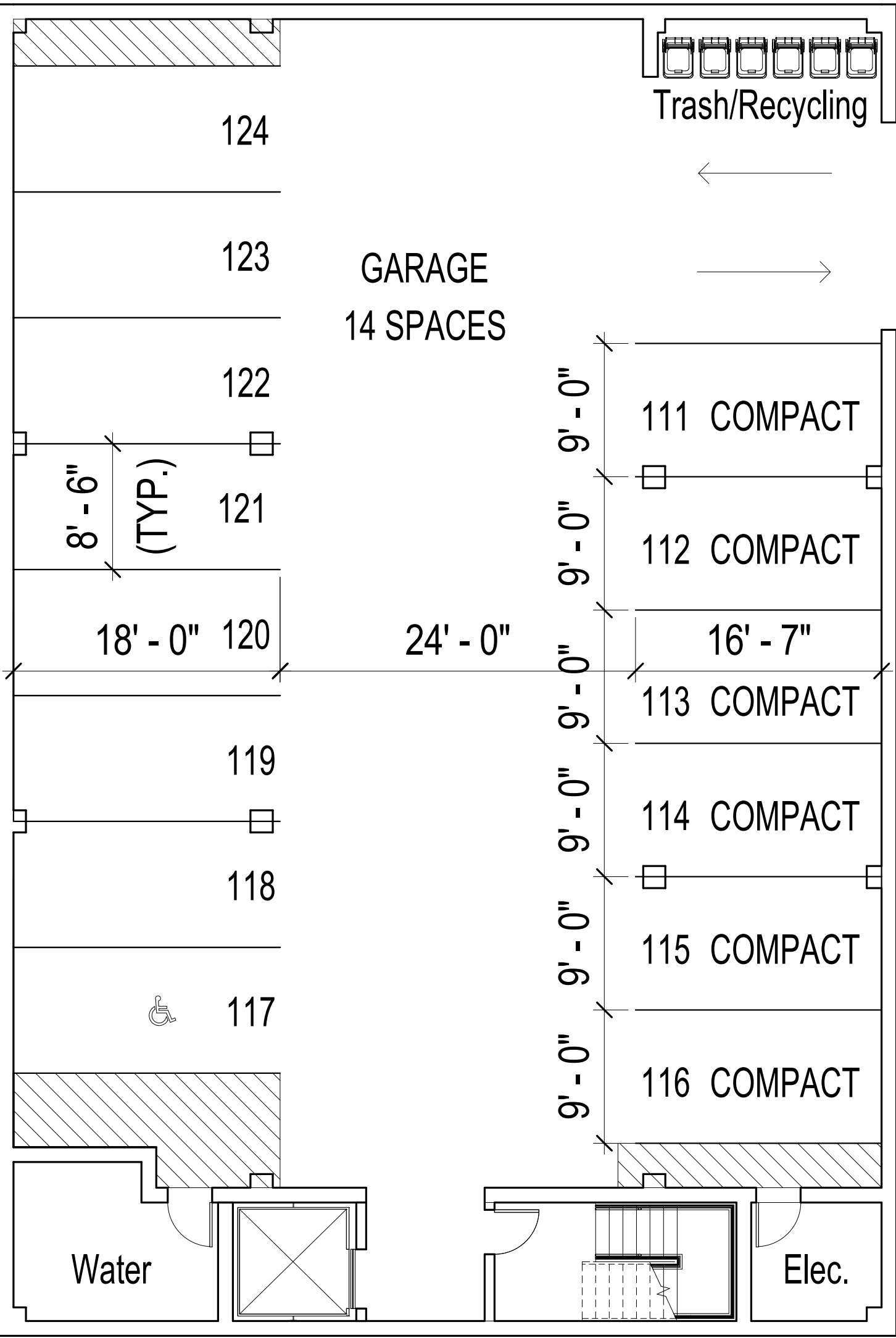
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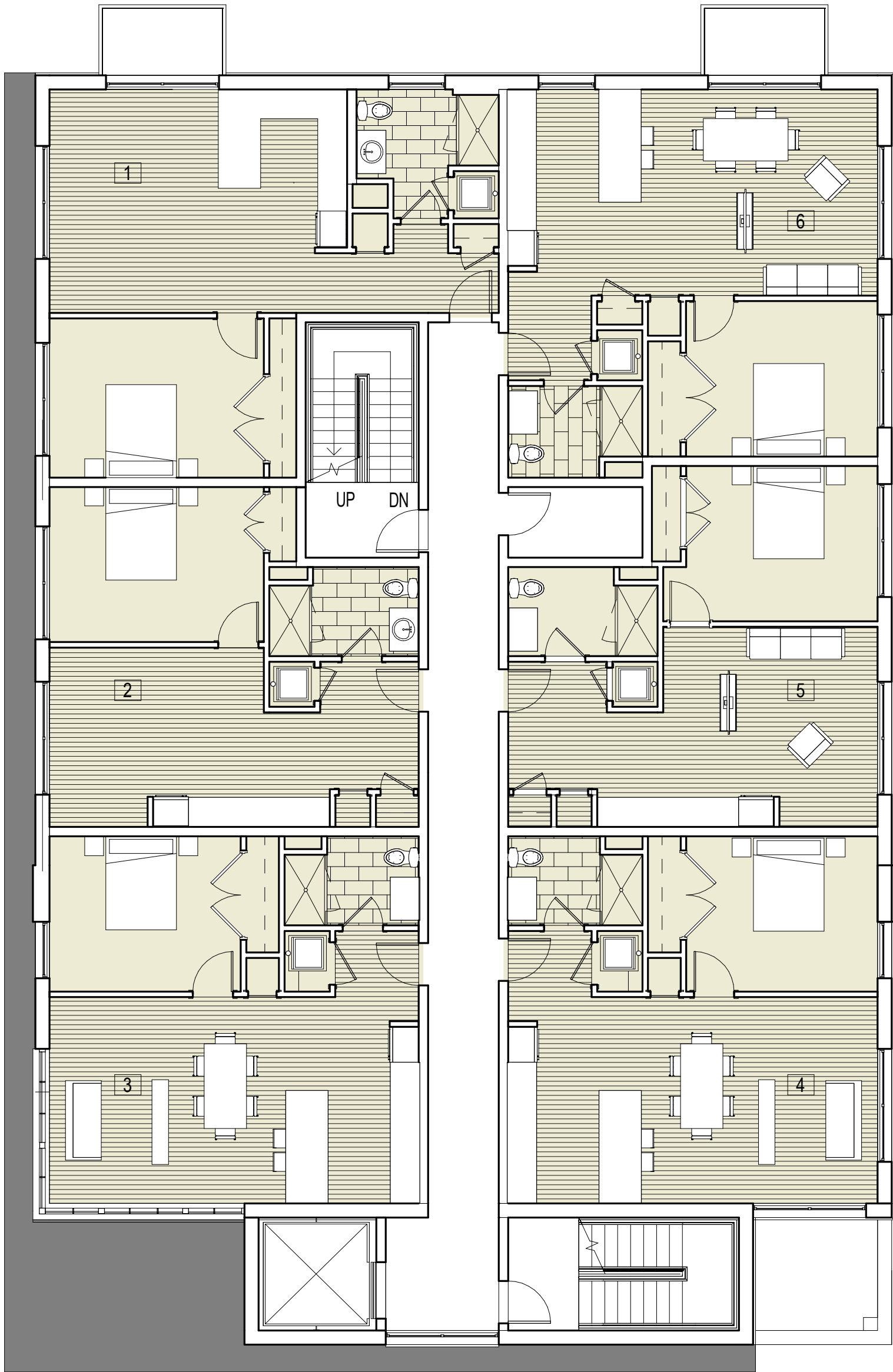




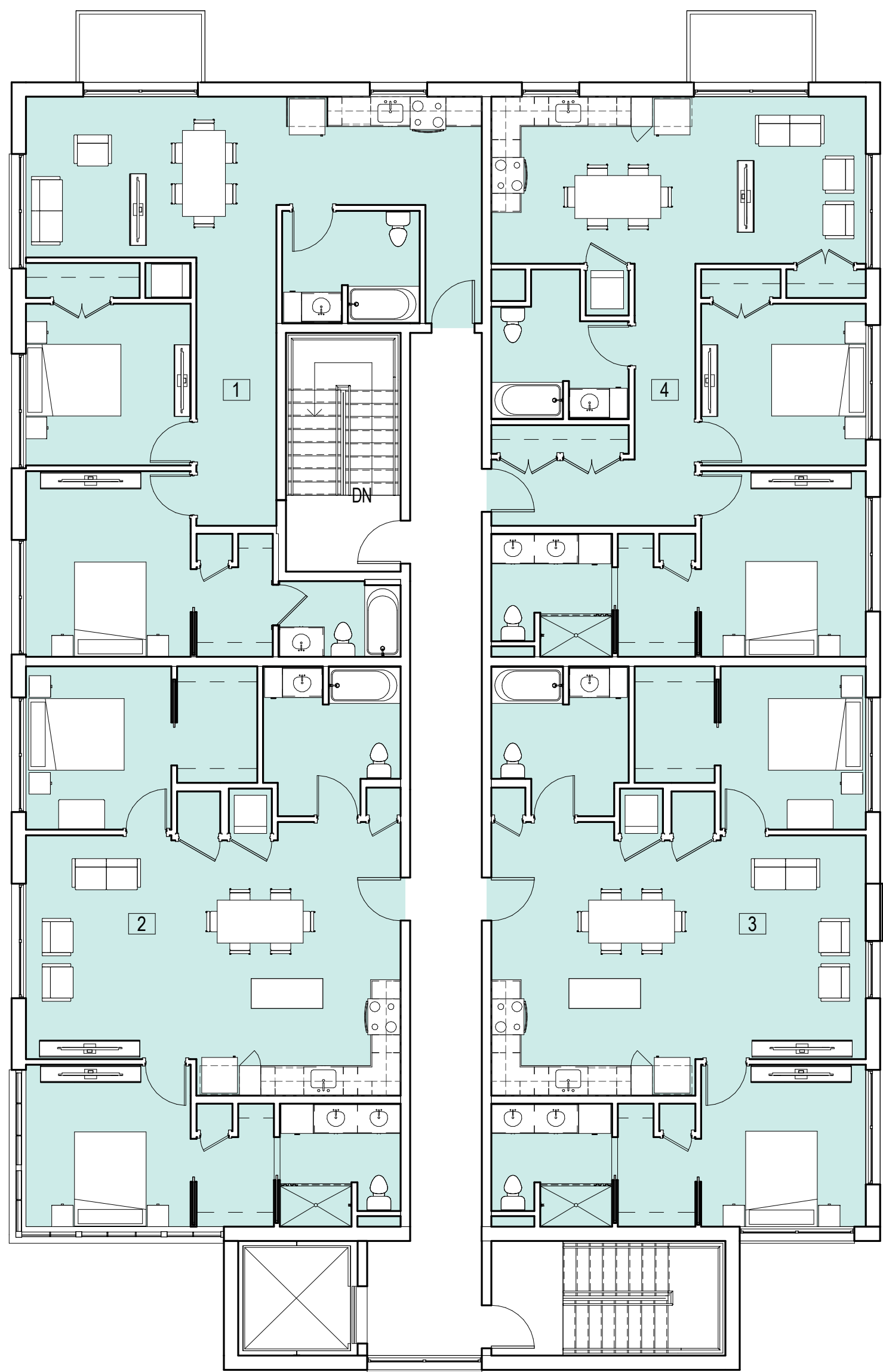
1 Building #2 Parking Plan



2 First Floor Plan



3 Typical Floor Plan 2-4



4 Building #2 Fourth Floor Plan



5 Building #2 Roof

ARCHITECT  
**bh+a**  
Bargmann Hendrie + Archetype, Inc.  
9 Channel Center Street  
Boston, MA 02210  
617.350-0450 Tel

PROJECT NAME  
**Redevelopment  
of 1165R  
Massachusetts  
Avenue**  
1165R Massachusetts Avenue,  
Arlington, MA 02476

CLIENT  
**1165R Mass MA  
Property LLC**  
  
c/o Spaulding & Slye Investments  
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**Landscape Architect**  
Kyle Zick Landscape Architecture  
36 Bromfield Street, Suite 202  
Boston, MA 02108

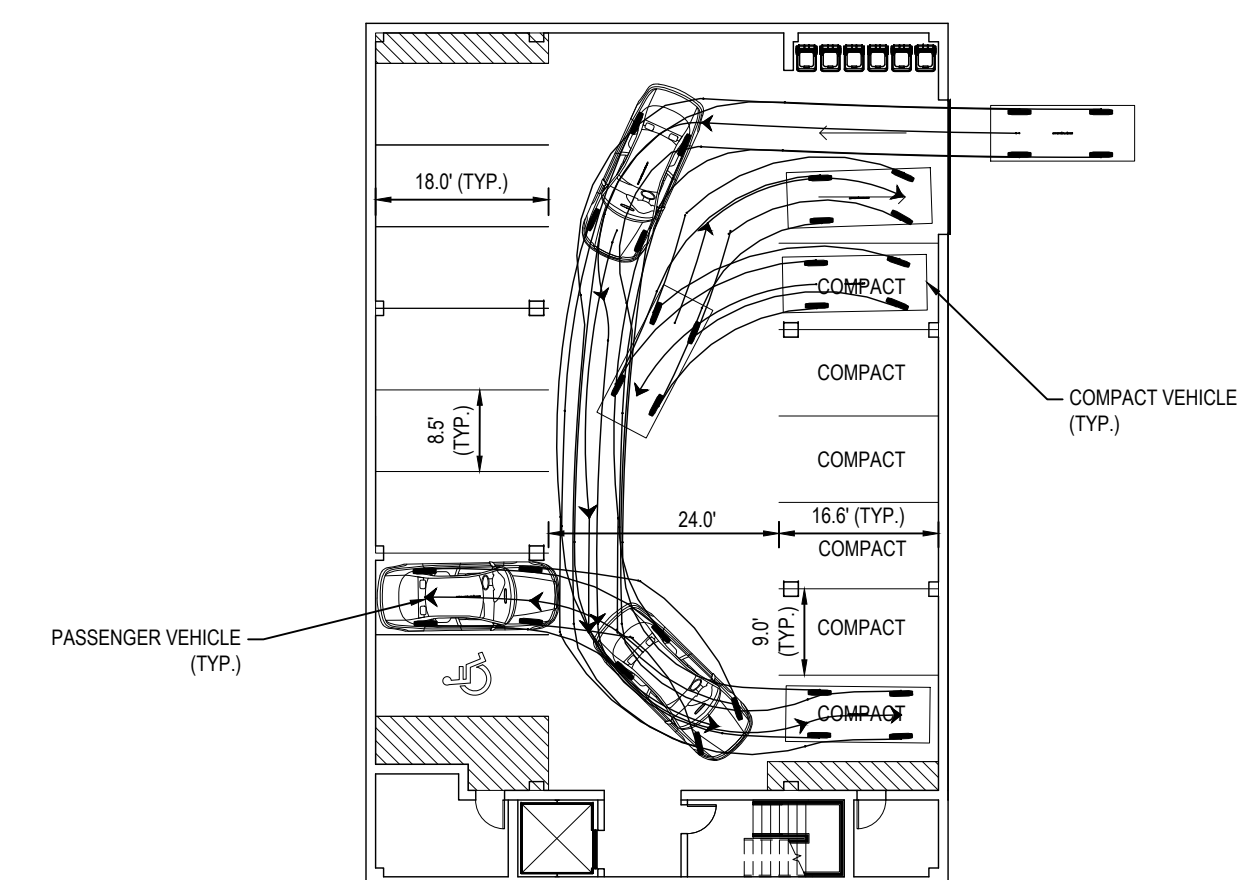
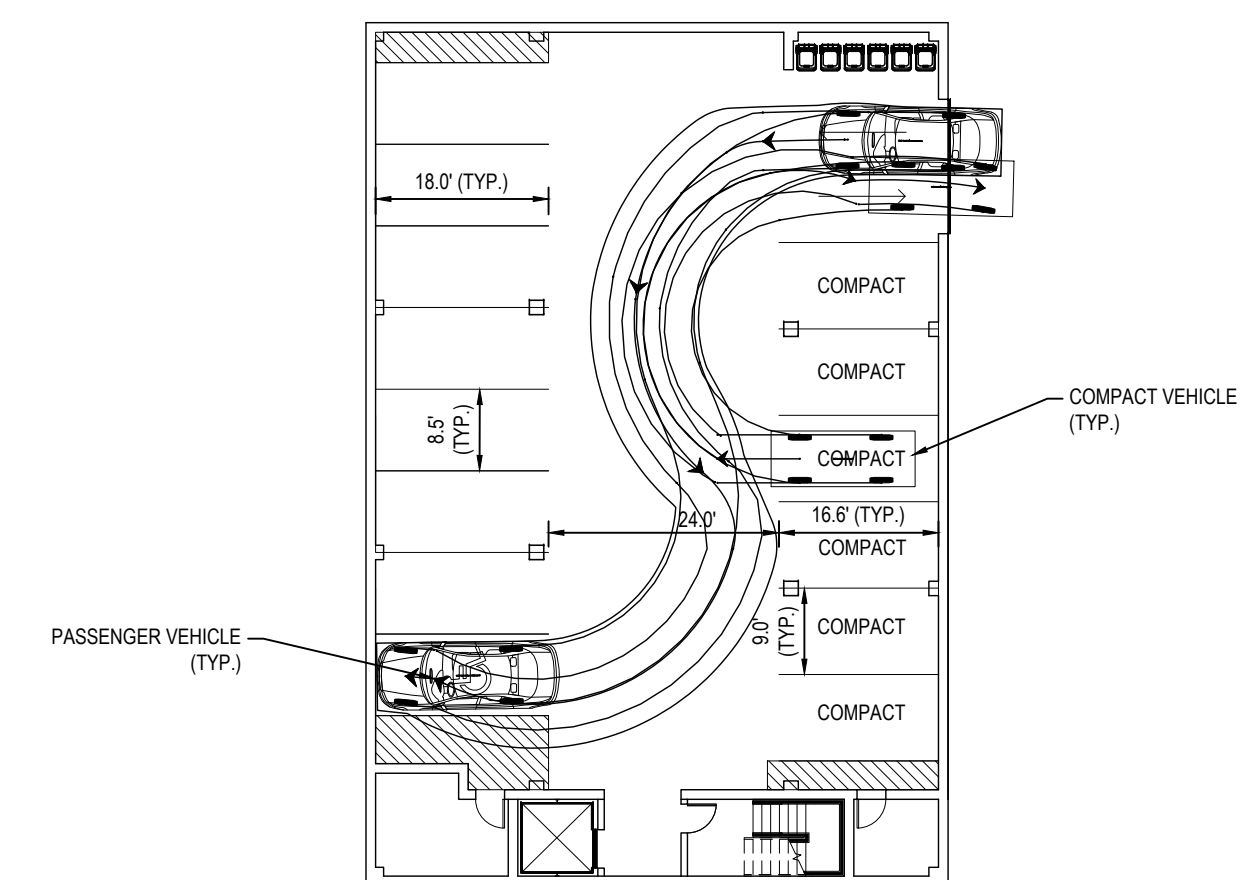
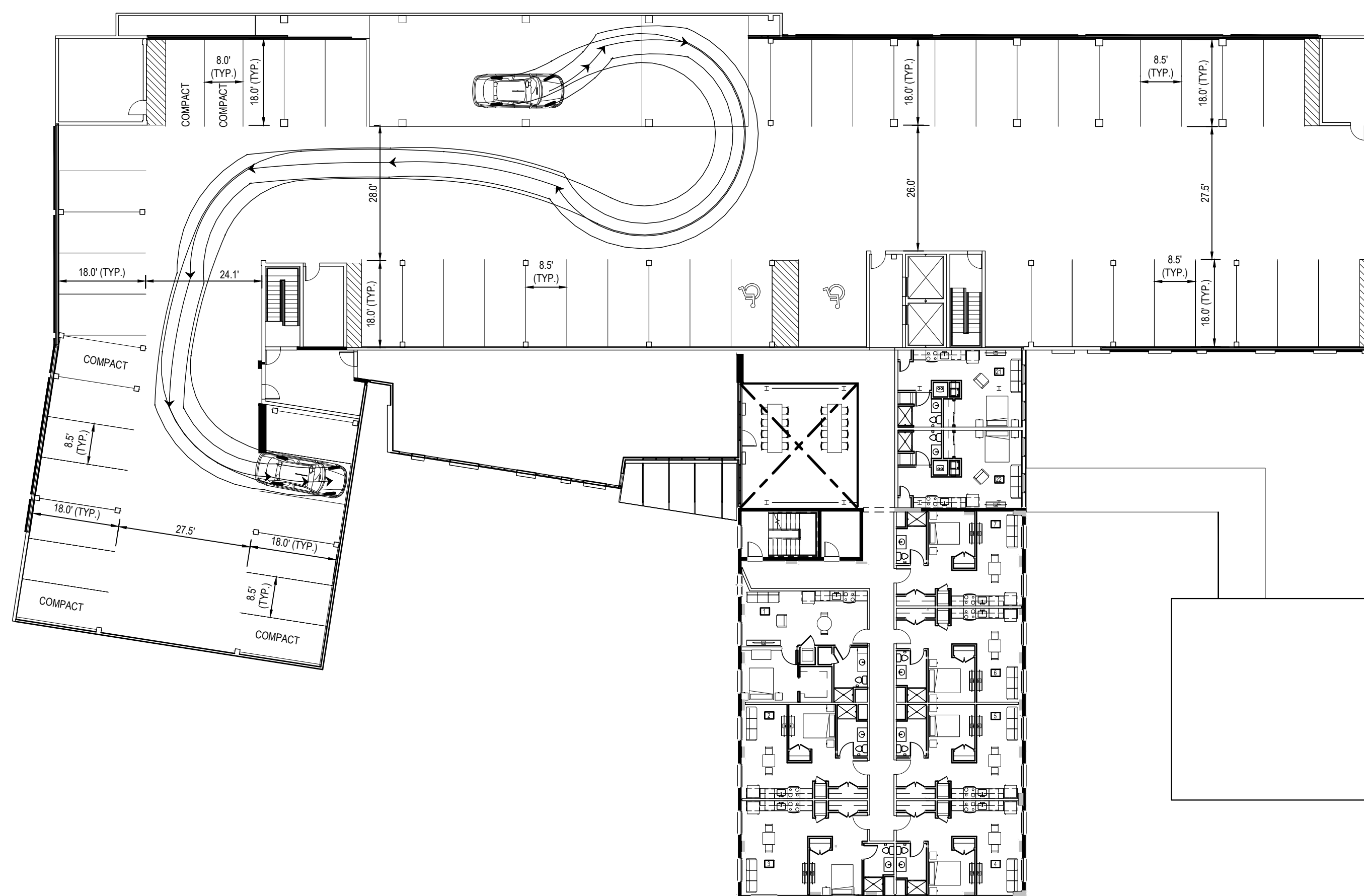
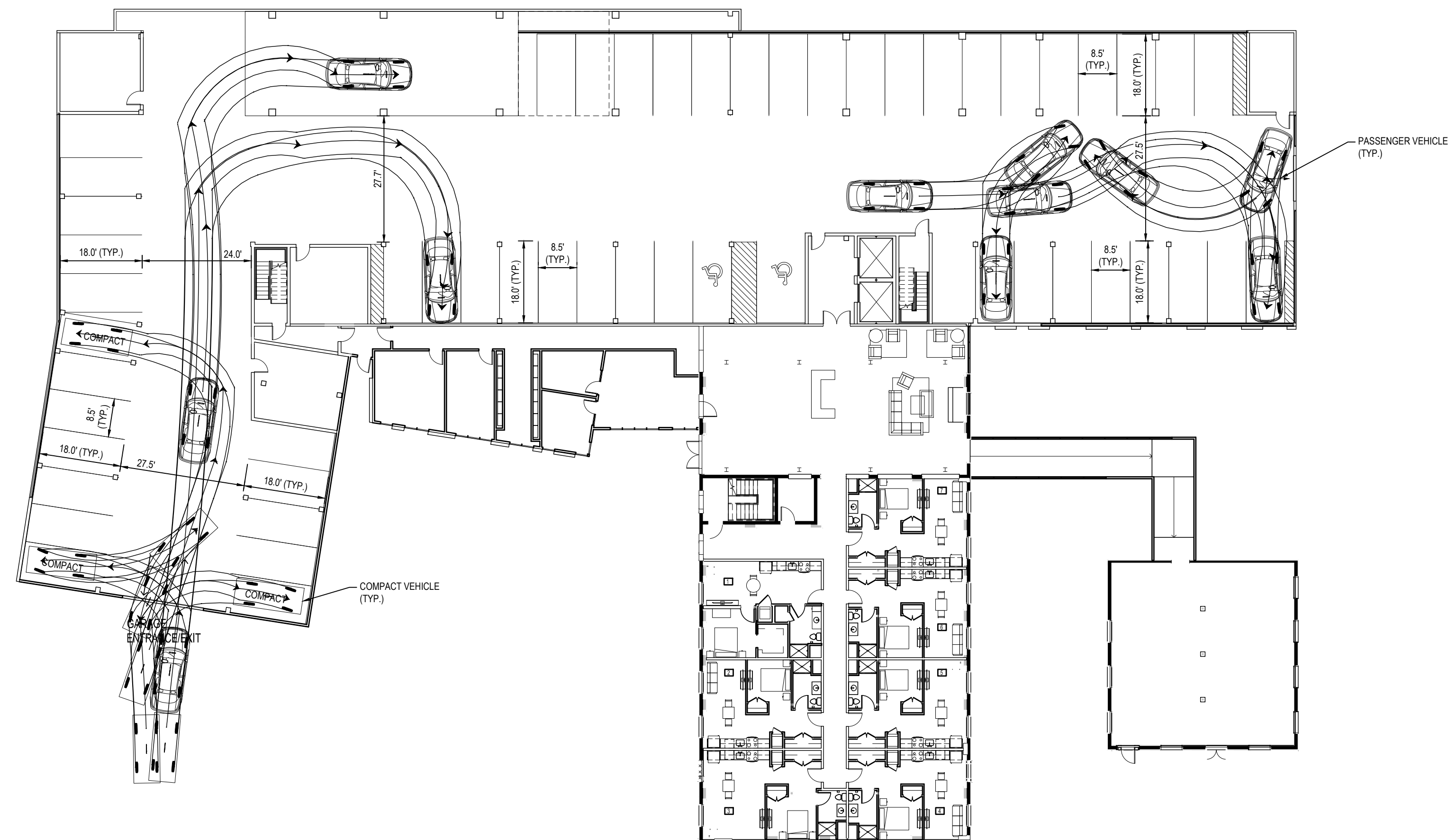
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DRAWING TITLE  
**Building #2  
Floor Plans**

DRAWING INFORMATION  

April 22, 2021  
DATE OF ISSUE  
MassHousing  
DESCRIPTION  
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Michael Barker  
SCALE  
3/4" = 1'-0"  
3/4" = 1'-0"  
PROJECT #  
FILE NAME

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PROJECT No.: W191330  
DRAWN BY: AW  
CHECKED BY: JL  
DATE: 03/03/2019  
CAD I.D.: W191330-GARAGE EXHIBIT

**PROJECT:**

**PROPOSED  
EXHIBIT PLAN**

— FOR —

**1165R MASS MA  
PROPERTY LLC**

**PROPOSED  
RESIDENTIAL DEVELOPMENT  
1165R MASSACHUSETTS AVE.  
MIDDLESEX COUNTY  
TOWN OF ARLINGTON, MA  
MAP #57, BLOCK #2, LOT #10B  
AND PART OF LOT #15**

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RHODE ISLAND LICENSE No. 11425

SHEET TITLE:

## 130 UNIT GARAGE VEHICLE TURNING EXHIBIT

SHEET NUMBER:

1

REVISION 3 - 04/29/21





# Traffic Impact Report

1165R Mass Ave Apartments  
1165R Massachusetts Avenue  
Arlington, MA

April 30, 2021

Prepared for:

1165R Mass MA Property LLC  
c/o Spaulding & Slye Investments  
One Post Office Square, 28<sup>th</sup> Floor  
Boston, MA 02109

Submitted by:

Nitsch Engineering  
2 Center Plaza, Suite 430  
Boston, MA 02108

Nitsch Engineering Project #13990.





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## 1 Introduction

Nitsch Engineering has prepared this Traffic Impact Report (TIR) for the proposed 1165R Mass Ave Apartments (“Project”), a building renovation and expansion project that will include an apartment complex with structured parking in the Mirak Innovation Park, located at 1165R Massachusetts Avenue in Arlington, Massachusetts. This TIR will review existing roadway conditions, access/egress, crash data, and traffic volumes, and it will analyze existing and future conditions at intersections in the study area to establish the impact the proposed improvements would have on traffic operations.

Figure 1 shows the Locus Map and Figure 2 shows the existing site and study area.

### 1.1 Existing Site

The proposed Project is located within the Mirak Innovation Park at 1165R Massachusetts Avenue in Arlington, Massachusetts. The Mirak Innovation Park is bounded by Massachusetts Avenue to the south, Quinn Road (Mirak Innovation Park East Driveway) to the east, the Minuteman Commuter Bikeway to the north, Forest Street to the southwest, and Ryder Street to the west. Mill Brook passes through the Innovation Park from west to east.

The site is located adjacent to the 2-story Workbar building, located at 1167 Massachusetts Avenue. Adjacent to Workbar is a 3-story building (“southeast building”), and north of Mill Brook is a 4-story office building and a 1-story annex building bisected by a 12-foot wide reinforced concrete bridge over Mill Brook, which provides one (1) 9-foot bi-directional travel lane for access to the rear parking lots. All access to and egress from the Innovation Park is provided via Quinn Road, an Innovation Park driveway off Massachusetts Avenue (“West Driveway”), and a driveway off Ryder Street. In addition to Workbar, the two other main abutters are the Mirak Hyundai Car Dealership and the Robert Annesse Law Office. Both uses were granted an easement to use the West Driveway access for all egress and ingress.


Seventy-six parking spaces are provided for Workbar and “Mill Building” tenants behind the existing Workbar building, as indicated on the site survey conducted by Control Point Associates, dated November 13, 2019. An additional 48 parking spaces behind the Mirak Chevrolet are also provided for tenants via a short-term lease agreement.

### 1.2 Proposed Development

Based on the current Site Plan, the proponent proposes to demolish the 3-story building east of Workbar and the 1-story annex building to the north of Mill Brook to develop two (2) new buildings and renovate two (2) existing buildings. The buildings to be removed are referred to as the “Mill Building” in this report. The Project will consist of three (3) apartment buildings with 130 dwelling units and one (1) building for amenity space. Table 1 presents the current plan for the Apartment Mix.

**Table 1 – Apartment Mix**

Type	Percent Mix	Number of Units	Number of Bedrooms
Studio	24%	31	31
1-Bedroom	42%	55	55
2-Bedroom	24%	31	62
3-Bedroom	10%	13	39
<b>Total</b>	<b>100%</b>	<b>130</b>	<b>187</b>



Existing surface parking behind Workbar will be eliminated. However, 124 new parking spaces will be provided in the garages of Buildings #2 and #4, and 11 surface parking spaces will be provided. An agreement has been established to allow Workbar tenants to occupy 40 parking spaces during weekday business hours and 10 parking spaces at night and on weekends.

To accommodate two-way vehicular traffic and pedestrian traffic from Massachusetts Avenue to the north of Mill Brook, the bridge will have to be reconstructed to include two (2) 10.5-foot travel lanes and a minimum 4-foot wide sidewalk. The project team has employed a structural engineering team to assess the existing bridge conditions and to design a new bridge that will accommodate daily traffic as well as emergency vehicles.

### 1.3 Study Area

The study area includes the Mirak Innovation Park site, 12 adjacent roadway segments, and seven (7) intersections.

#### **Roadways**

- Massachusetts Avenue;
- Forest Street;
- Peirce Street;
- Ryder Street;
- Appleton Street;
- Appleton Place;
- Burton Street;
- Pine Court;
- Quinn Road (Mirak Innovation Park East Driveway);
- Mirak Innovation Park West Driveway;
- Quinn Access Road; and
- Mirak Innovation Park Ryder Street Driveway.


#### **Intersections**

- Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway;
- Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway;
- Massachusetts Avenue and Pine Court;
- Massachusetts Avenue and Quinn Road (Mirak Innovation Park East Driveway);
- Mirak Innovation Park West Driveway and Quinn Access Road;
- Forest Street and Ryder Street/Peirce Street; and
- Ryder Street and Mirak Innovation Park Ryder Street Driveway.

### 1.4 Methodology

The traffic analysis herein summarizes the following:

1. A data collection of existing transportation conditions, including traffic data, crash history, roadway capacities, parking, transit, pedestrian and bicycle circulation, loading, and site conditions.

- 
2. An evaluation of future transportation conditions and an assessment of potential traffic impacts associated with the Project and other neighboring projects. Long-term impacts are evaluated for the year 2025, based on a five-year horizon from the 2020 base year. Expected roadway, parking, transit, pedestrian, and loading conditions and deficiencies are identified. This section includes the following scenarios:
    - a. The No-Build Scenario (2025), which includes general background growth and additional vehicular traffic associated with specific proposed or planned developments and roadway changes in the vicinity of the Project site; and
    - b. The Build Scenario (2025), which also includes specific travel demand forecasts associated with the Project.
  3. An evaluation of crash data and traffic volumes to determine if a traffic signal is warranted at any of the study intersections
  4. An identification of appropriate measures to mitigate Project-related impacts identified in the previous phase.
  5. An evaluation of short-term traffic impacts associated with construction activities.





**Figure 1: Locus Map**

1165R Mass Ave Apartments

Arlington, MA

Data Source: MassGIS  
Nitsch Project #13990.





**Figure 2: Existing Site and Study Area**

1165R Mass Ave Apartments

Arlington, MA

Data Source: MassGIS  
Nitsch Project #: 13990.





## 2 Existing Conditions

### 2.1 Roadways

#### ***Massachusetts Avenue***

Massachusetts Avenue, colloquially referred to as Mass Ave, is a two-lane principal arterial roadway under Town of Arlington jurisdiction that stretches for 16 miles from the Dorchester neighborhood of Boston northwest to Minuteman Park in Lexington. Near the site, Massachusetts Avenue runs generally east-west with one lane in each direction, each approximately 14 feet wide, separated by a double-yellow center line. The sidewalks along both sides of the roadway are in good condition. Two-hour parking is provided on both sides of the roadway via 8-foot wide parking lanes, and shared bicycle pavement markings (“sharrows”) are provided in both directions in the vehicular travel lanes. The posted speed limit along Massachusetts Avenue in the site vicinity is 30 miles per hour (mph). There are two (2) Massachusetts Bay Transportation Authority (MBTA) bus stops in the site vicinity, one in each direction, that service the MBTA’s 77 and 79 bus routes.

#### ***Forest Street***

Forest Street is a two-lane collector roadway under Town of Arlington jurisdiction that runs in the general north-south direction from its northern terminus at Summer Street approximately a quarter mile to its southern terminus at Massachusetts Avenue. Near the site, Forest Street is 22 feet wide with no lane markings. Asphalt sidewalks in good condition are present on both side of the roadway, and on-street parking is restricted near the site. The speed limit is not posted along the roadway.

#### ***Peirce Street***

Peirce Street is a two-lane local roadway under Town of Arlington jurisdiction that runs in the east-west direction from its western terminus at Locke Street approximately 0.15 miles to its eastern terminus as Forest Street. Near the site, Peirce Street is 22 feet wide with no lane markings. Concrete sidewalks with grass buffers are present and parking is allowed on both sides of the roadway. The speed limit is not posted along the roadway.

#### ***Ryder Street***

Ryder Street is a two-lane private way, half of which is under ownership of the Project, from Forest Street to the site driveway. Ryder Street runs in the northeast-southwest direction from its southwestern terminus at Forest Street at Mill Brook to its northeastern terminus at the Minuteman Commuter Bikeway. Adjacent to the Ryder Street Driveway, Ryder Street is only 20 feet wide, though parking is not restricted on either side of the roadway. Asphalt sidewalk in good condition is provided only on the east side on the Ryder Street Bridge over Mill Brook, and no pavement markings are present along the roadway. The speed limit is not posted along the roadway.

#### ***Appleton Street***

Appleton Street is a two-lane major collector roadway under Town of Arlington jurisdiction that runs in the northeast-southwest direction that connects Massachusetts Avenue, at its northeastern terminus, to Concord Avenue (Route 2) at its southwestern terminus. At its intersection with Massachusetts Avenue, the roadway provides one lane with marked shoulder in each direction, each lane approximately 12 feet wide, separated by a double-yellow center line. Centerline markings and shoulder makings are present from Massachusetts Avenue to Acton Street, about 200 feet to the west. Concrete sidewalks with grass buffers are present on both sides of the roadway. Although the marked shoulders are not wide enough for standard vehicles to park, parking is not restricted along the roadway. The speed limit is not posted along the roadway.



### ***Appleton Place***

Appleton Place is a two-lane local roadway under Town of Arlington jurisdiction that runs in the general northwest-southeast direction that connects Massachusetts Avenue at its northwestern terminus to Quincy Road approximately a quarter mile to the southeast. The road is 22 feet wide with no lane markings. Concrete sidewalks are present on both sides of the roadway, and parking is not restricted on the southeast-bound side of the road. The speed limit is not posted along the roadway.

### ***Burton Street***

Burton Street is a two-lane local roadway under Town of Arlington jurisdiction that runs in the north-south direction from its northern terminus at Massachusetts Avenue approximately three-quarters of a mile to its southern terminus at Appleton Place. The road is 22 feet wide with no lane markings. Concrete sidewalks with grass buffer strips are present and parking is not restricted on both sides of the roadway. The speed limit is not posted along the roadway.

### ***Pine Court***

Pine Court is a narrow privately owned local roadway that runs in the north-south direction from its northern terminus at Massachusetts Avenue approximately three-quarters of a mile to its southern terminus at Appleton Place. Although the road is narrow, parking is not restricted. Sidewalks are not provided on either side of the roadway; and the pavement is in poor condition and in need of repairs. The speed limit is not posted along the roadway.

### ***Quinn Road***

Quinn Road is two-way local roadway under Town of Arlington jurisdiction that runs in the north-south direction. The road serves as a driveway entrance to the Mirak Innovation Park next to the Mirak Chevrolet service center. At its intersection with Massachusetts Avenue, the road is approximately 30 feet with no lane markings and no sidewalks. The speed limit is not posted along the roadway.

### ***Mirak Innovation Park West Driveway***

Mirak Innovation Park West Driveway is private and under ownership of the Project proponent. The driveway runs in the north-south direction, connecting Massachusetts Avenue to the Workbar/Mirak Mill parking lot over the Mill Brook bridge. The driveway is approximately 20 feet wide with no lane markings and no sidewalks.

### ***Quinn Access Road***

Quinn Access Road is a privately owned roadway that runs parallel to Massachusetts Avenue in the east-west direction, connecting the Mirak Innovation Park West Driveway to Quinn Road south of Mill Brook. The roadway is not under the ownership of the project proponent. The road serves as access to three small, paved surface parking lots that are used by abutting businesses. The speed limit is not posted along the roadway.

### ***Mirak Innovation Park Ryder Street Driveway***

Mirak Innovation Park Ryder Street Driveway is privately owned and under ownership of the project proponent. The driveway runs in the east-west direction from Ryder Street to the Mirak Mill Park West Driveway north of Mill Brook. The driveway provides direct access to the existing surface parking space located to the north of Workbar. This driveway has been historically used for vehicular access, parking, and material storage by the Legacy owners of the subject property. The driveway also provides via easements, access to the abutting property at 15 Ryder Street.





## 2.2 Study Intersections

### ***Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway***

Massachusetts Avenue intersects with Appleton Street, Appleton Place, and a commercial driveway to form a five-legged intersection, with the Massachusetts Avenue approaches operating freely, and the Appleton Street and Appleton Place under stop control. The Massachusetts Avenue eastbound and westbound approaches consist of one full-movement lane with adjacent on-street parking in each direction. The Appleton Street northeast-bound approach and the Appleton Place northbound approach each consist of one full-movement lane with stop signs and stop bars present. The commercial driveway southbound approach consists of one full-movement lane with no stop signs or stop bars present. Bus stops for the MBTA Bus Routes 77 and 79 are located at the Massachusetts Avenue eastbound approach. Ladder-style painted crosswalks are present at the westbound and northbound approaches accompanied by wheelchair ramps with detectable warning panels at each corner. Traffic signals are present at each corner of the intersection and flash yellow to warn motorists to proceed with caution. The signal provides a pedestrian activated traffic signal that operates under “flash” when not activated and steady “yellow/red” with “Walk/Don’t Walk” when activated. The intersection effectively operates as an unsignalized intersection. Although the traffic signal does not meet current federal regulations stated in the Manual of Uniform Traffic Control Devices (MUTCD), there is no current plan by the Town to revise the traffic signal.

### ***Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway***


Massachusetts Avenue intersects with Forest Street, Burton Street, and the Mirak Innovation Park West Driveway to form a five-legged unsignalized intersection, with the two Massachusetts Avenue approaches operating freely, and the Forest Street, Burton Street, and West Driveway approaches under stop control. The Massachusetts Avenue eastbound and westbound approaches consist of one 14-foot wide full-movement lane with adjacent on-street parking in each direction. The Burton Street northbound approach consists of one full-movement lane with a stop sign and stop bar present and no posted parking restrictions. The Forest Street southeast-bound approach consists of one full-movement lane with parking restricted on both sides of the roadway and a stop sign and stop bar present. The West Driveway southbound approach provides one lane in each direction, though there are no pavement markings present. Ladder-style painted crosswalks are present at the eastbound, northbound, and southbound approaches, accompanied by wheelchair ramps with detectable warning panels at each corner.

### ***Massachusetts Avenue and Pine Court***

Massachusetts Avenue intersects with Pine Court to form a three-legged unsignalized intersection, with the Massachusetts Avenue approaches operating freely, and the Pine Court approach under stop control. The Massachusetts Avenue eastbound and westbound approaches consist of one full-movement lane with adjacent on-street parking in each direction. The Pine Court northbound approach consists of one full-movement lane; however, there is no stop sign, yield sign, or stop bar present. A ladder-style painted crosswalk is present at the Pine Court approach accompanied by wheelchair ramps with detectable warning panels at each corner.

### ***Massachusetts Avenue and Quinn Road (Mirak Innovation Park East Driveway)***

Massachusetts Avenue intersects with Quinn Road to form a three-legged unsignalized intersection, with the Massachusetts Avenue approaches operating freely, and the Quinn Road approach under stop control. The Massachusetts Avenue eastbound and westbound approaches consist of one full-movement lane with adjacent on-street parking in each direction. The Quinn Road southbound approach consists of one full-movement lane with a stop sign and stop bar. The stop sign for the southbound approach is attached to a utility pole on the left side of



the approach. A ladder-style painted crosswalk is present at the Quinn Road approach accompanied by wheelchair ramps with detectable warning panels at each corner.

#### ***Mirak Innovation Park West Driveway and Quinn Access Road***

The West Driveway intersects with Quinn Access Road to form a three-legged unsignalized intersection, with the West Driveway approaches operating freely and the Quinn Access Road westbound approach terminating at the West Driveway. The West Driveway and Quinn Access Road approaches consist of one full-movement lane in each direction with no stop signs or stop bars present.

#### ***Forest Street and Ryder Street/Peirce Street***

Forest Street intersects with Peirce Street and Ryder Street to form a four-legged unsignalized intersection, with the Forest Street approaches operating freely, and the Ryder Street and Peirce Street approaches under stop control. The Forest Street northbound and southbound approaches consist of one full-movement lane with adjacent on-street parking in each direction. The Peirce Street eastbound approach consists of one full-movement lane with a stop sign and stop bar. The Ryder Street westbound approach, offset slightly to the south relative to Peirce Street, consists of one full-movement lane; however, there is no stop sign, yield sign, or stop bar present. A ladder-style painted crosswalk is present at the Peirce Street approach accompanied by wheelchair ramps with detectable warning panels at each corner.

#### ***Ryder Street and Mirak Innovation Park Ryder Street Driveway***

Ryder Street intersects with Mirak Mill Ryder Street Driveway to form a three-legged unsignalized intersection, with the Ryder Street approaches operating freely and the driveway westbound approach under stop control. The Ryder Street eastbound and westbound approaches consist of one full-movement lane with adjacent on-street parking in each direction. The Ryder Street Driveway approach consists of one full-movement lane with no stop signs or stop bars present.

### **2.3 Public Transportation**

#### ***Subway***

Alewife Station is located about 3.5 miles southeast of the study area at the intersection of Concord Turnpike and Alewife Brook Parkway in Cambridge. The station is the northern terminus of the MBTA's Red Line, which provides direct access to Downtown Boston and other cities, including Somerville, Quincy, and Braintree.

#### ***Bus***

MBTA bus services are available near the site. MBTA Bus Route 67, connecting Alewife Station and Turkey Hill, runs along Summer Street. The closest stops for Route 67 traveling to Alewife are located on the south side of Summer Street about 125 feet east of Forest Street and at the intersection of Washington Street and Summer Street. Bus Route 67 coming from Alewife to Turkey Hill stops at the intersection of Summer Street and Washington Street and then travels along Washington Street to Lawrence Lane. MBTA Bus Routes 77 and 79 run along Massachusetts Avenue near the site. Route 77 connects between Arlington Heights and Harvard Square, and Route 79 connects between Arlington Heights and Alewife Station. The closest designated stops for both inbound and outbound directions for these routes are located at the intersection of Massachusetts Avenue and Appleton Street/Appleton Place and at the intersection of Massachusetts Avenue and Quincy Street. Routes 67 and 79 provide direct access to Alewife Station, and Route 77 provides access to East Arlington, Somerville, and Cambridge.



## 2.4 Bicycle Facilities

The Minuteman Commuter Bikeway, a 10-mile long paved trail connecting Bedford to Alewife Station, passes near the north boundary of the Mirak Innovation Park, running parallel to Massachusetts Avenue. The length of the bikeway from Ryder Street to Alewife Station is about 3.5 miles, making it a useful non-motorized commuting option. Access to the Bikeway is provided at the north end of Ryder Street, making it easily accessible from the proposed site. Massachusetts Avenue has shared lanes with Sharrows in both directions of travel, and Appleton Street has paved shoulders in both directions that can be used by bicyclists. Shared or dedicated bicycle lanes are not present on the rest the town-owned or private roadways in the project area, though motorized volumes are comparatively low on those roads. A dockless bike-sharing program was being operated in the town until the end of 2019.

## 2.5 Pedestrian Mobility

Sidewalks are present on both sides of Massachusetts Avenue, Forest Street, Appleton Street, Appleton Place, and Burton Street, providing ample opportunity for pedestrian mobility. Crosswalks are present at the intersection of Forest Street and Ryder Street/Peirce Street and at all intersections along Massachusetts Avenue. On-site sidewalks are not currently present on the West Driveway from Massachusetts Avenue or on the Site Driveway from Ryder Street.

# 3 Existing Traffic Conditions

## 3.1 Traffic Count Data

Nitsch Engineering retained Precision Data Industries, Inc. (PDI) of Framingham, Massachusetts to collect traffic data within the study area, including both Automatic Traffic Recorder (ATR) counts and Turning Movement Counts (TMCs).

### ***ATR Data***

PDI collected ATR counts for a continuous 48-hour period at five locations from Tuesday, February 4, 2020 to Wednesday, February 5, 2020. The ATR data with seasonal adjustments per Section 3.2 are summarized in Table 2. The ATR data and calculations are included in Appendix A.

**Table 2 – Automatic Traffic Recorder (ATR) Summary**

Location	Period	ADT <sup>a</sup>			Peak Hour Traffic				K Factor <sup>d</sup>
		Volumes (vpd) <sup>b</sup>	Directional Distribution		Period	Volumes (vph) <sup>c</sup>	Directional Distribution		
Massachusetts Avenue, between Burton Road and Pine Court	Weekday	13,127	51%	EB	Morning	1,051	53%	WB	0.08
					Afternoon	1,084	56%	EB	0.08
Mirak Mill Park West Driveway, north of Massachusetts Avenue	Weekday	464	53%	NB	Morning	48	85%	NB	0.10
					Afternoon	41	77%	SB	0.09
Quinn Road, north of Massachusetts Avenue	Weekday	546	50%	SB	Morning	52	67%	NB	0.10
					Afternoon	41	76%	SB	0.08
Forest Street, north of Massachusetts Avenue	Weekday	4,042	56%	NB	Morning	480	61%	SB	0.12
					Afternoon	425	71%	NB	0.11
Burton Road, south of Massachusetts Avenue	Weekday	548	65%	SB	Morning	71	50%	SB	0.13
					Afternoon	27	67%	NB	0.05
<sup>a</sup> Average Daily Traffic; <sup>b</sup> Vehicles per day; <sup>c</sup> Vehicles per hour; <sup>d</sup> Proportion of daily traffic NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound									

### **TMC Data**

PDI collected TMC data at the seven (7) study intersections on Tuesday, February 4, 2020. TMC data was recorded from 7:00 AM to 9:00 AM to capture the weekday morning traffic peak hours and from 4:00 PM to 6:00 PM to capture the weekday evening traffic peak hours. The counts included passenger vehicles, heavy vehicles, bicycles, and pedestrians. The existing peak-hour traffic volumes at these intersections in the form of turning movements, seasonally adjusted per Section 3.2, are shown in Figure 3. The existing pedestrian peak-hour volumes are shown on Figure 4. The TMC data is included in Appendix A.



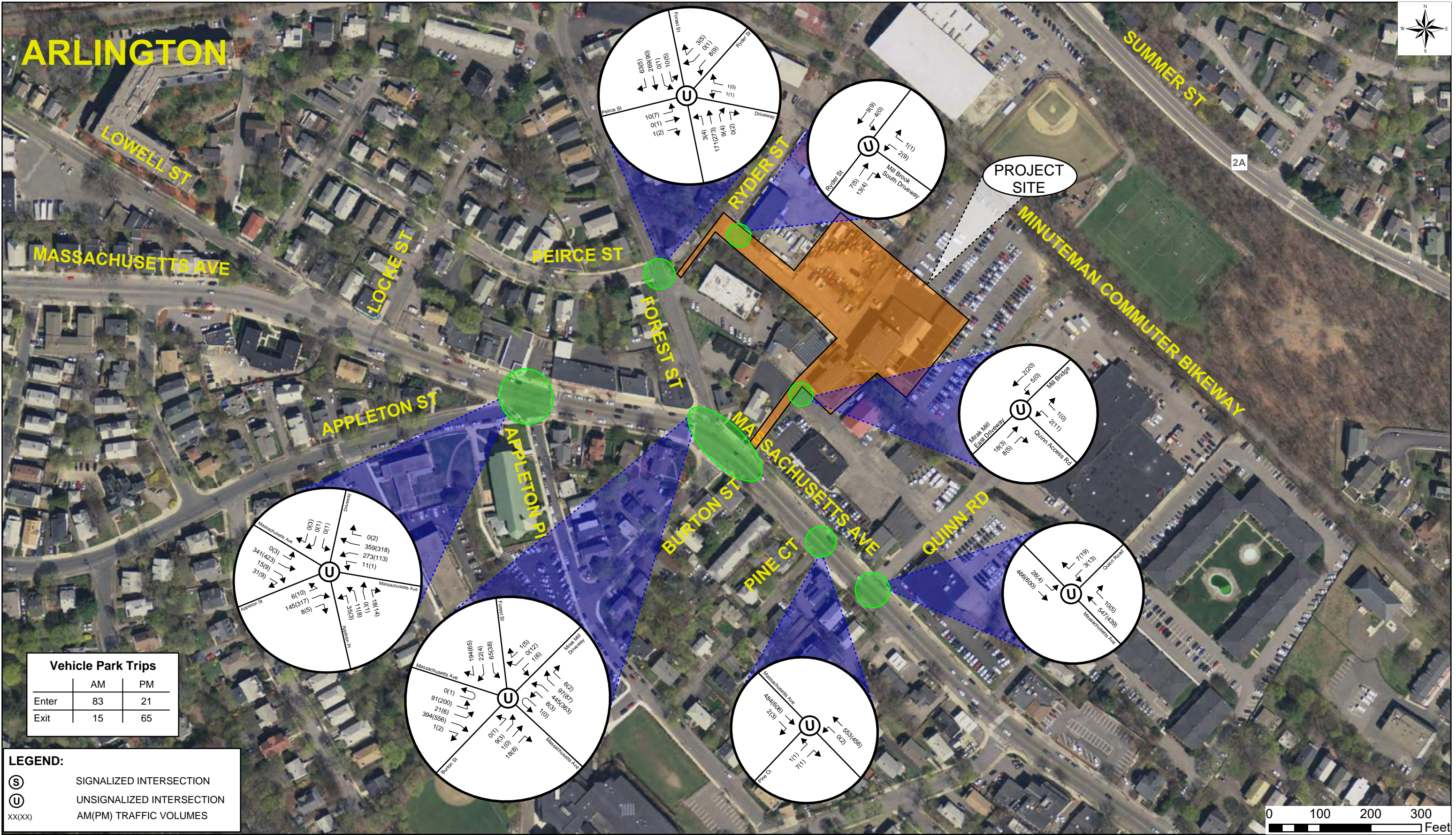


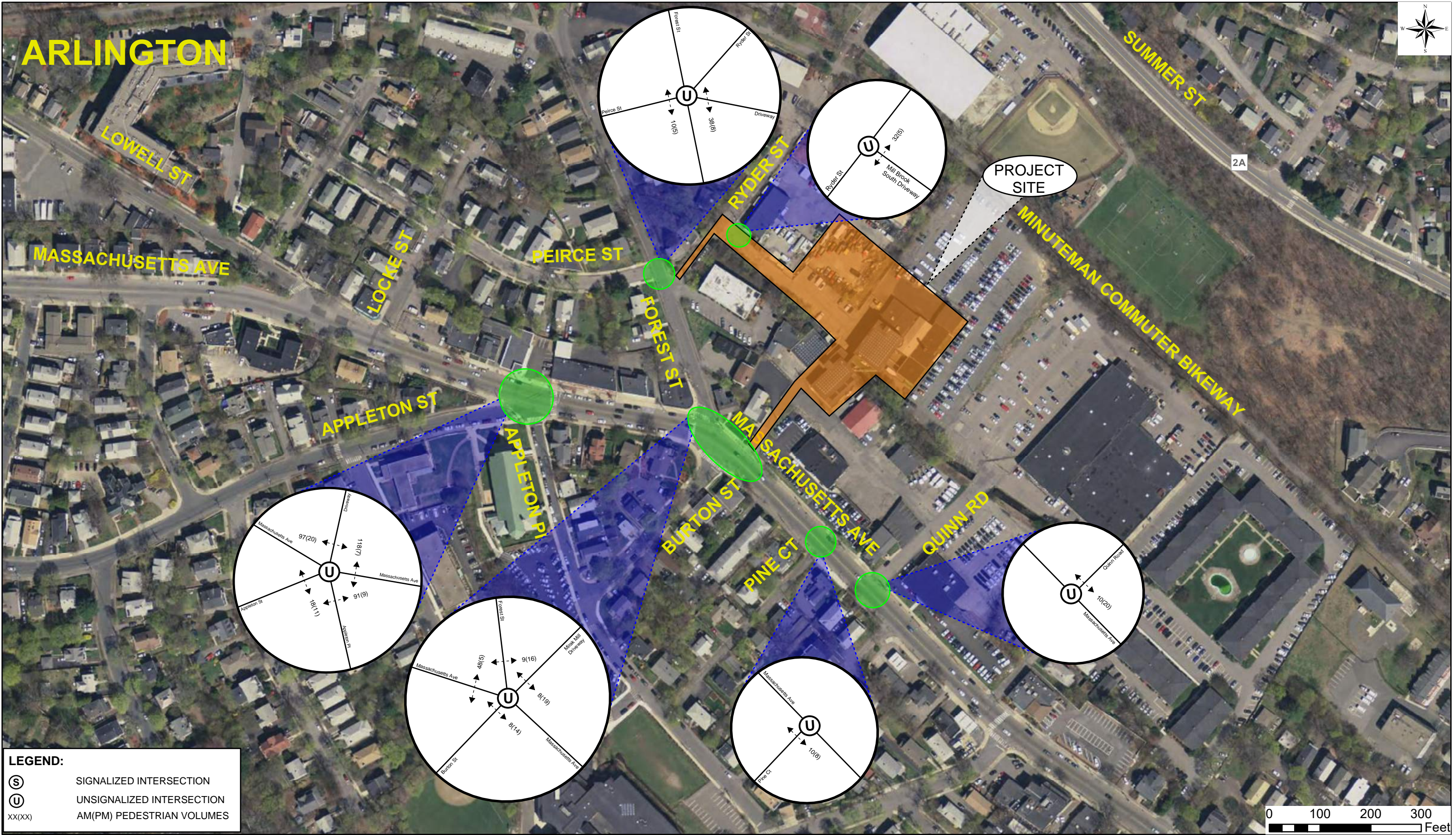
Figure 3: 2020 Existing Peak Hour Volumes

1165R Mass Ave Apartments

Arlington, MA

Data Source: MassGIS  
Nitsch Project #13990.





**Figure 4: 2020 Existing Pedestrian Peak Hour Volumes**

1165R Mass Ave Apartments

Arlington, MA

Data Source: MassGIS  
Nitsch Project #13990.





### 3.2 Seasonal Adjustment

Nitsch Engineering queried MassDOT traffic data for counts nearby that would establish a seasonal adjustment for the volumes we measured in May and June. No local data was available, so Nitsch Engineering used MassDOT's 2019 Weekday Seasonal Adjustment Factors.

Massachusetts Avenue falls within Group U3 – “Urban Other Principal Arterial.” Forest Street, Appleton Street, and Appleton Place fall within U5 – “Urban Major Collector.” Peirce Street, Ryder Street, Burton Street, Quinn Road, and Pine Court fall within U7 – “Urban Local Road.” The seasonal factors for counts within Group U3 for the month of February is 1.03, indicating that traffic volumes are 3% lower than average. For Groups U5 and U7, the seasonal factor for February is 1.00, indicating that it represents an average month. To present a conservative approach, we increased the counted volumes on all Massachusetts Avenue approaches by 3%, and we did not adjust the volumes on the approaches of all other roadways. Traffic volumes in Table 2 and Figure 3 reflect the seasonal adjustment. MassDOT's 2019 Weekday Seasonal Factors are included in Appendix B.

### 3.3 Parking Utilization Assessment

#### **Site Utilization**

As the Project will be eliminating most of the parking lot behind Workbar, the Proponent has agreed to provide enough garage parking to reserve 40 weekday spaces and 10 evening and weekend spaces for Workbar tenants. Therefore, Nitsch Engineering conducted a parking utilization assessment to determine the existing demand for Workbar tenants and determine if the agreed-upon allotted spaces would provide enough capacity. The parking lots allocated for Workbar and “Mill Building” tenant parking were counted on Wednesday, January 29, 2020 from 6:00 PM to 8:00 PM, on Thursday, January 30, 2020 from 6:00 AM to 8:00 AM and from 12:00 PM to 2:00 PM, and on Saturday, February 1, 2020 from 9:00 AM to 11:00 AM. Standard methodology for determining parking generation is to use the Institute of Transportation Engineers' (ITE) *Parking Generation, 5<sup>th</sup> Edition*<sup>1</sup> (“the ITE method”). Per ITE these count periods represent the peak and off-peak hours for a typical residential development during the weekday; and the combined overlapping peak hours for an office and residential development on a Saturday.

The parking utilization assessment summary is shown in Table 3.

---

<sup>1</sup> *Parking Generation*, Institute of Transportation Engineers, 5th Edition, 2019, Washington, D.C.

**Table 3 – Site Parking Utilization Assessment Summary**

Day and Time		Occupied Spaces	Maximum Utilization %
Weekday Morning	6:00 AM - 6:30 AM	1	4%
	6:30 AM - 7:00 AM	1	
	7:00 AM - 7:30 AM	3	
	7:30 AM - 8:00 AM	3	
Weekday Midday	12:00 PM - 12:30 PM	43	68%
	12:30 PM - 1:00 PM	52	
	1:00 PM - 1:30 PM	47	
	1:30 PM - 2:00 PM	45	
Weekday Evening	6:00 PM - 6:30 PM	5	7%
	6:30 PM - 7:00 PM	3	
	7:00 PM - 7:30 PM	4	
	7:30 PM - 8:00 PM	4	
Saturday Mid-morning	9:00 AM - 9:30 AM	3	5%
	9:30 AM - 10:00 AM	4	
	10:00 AM - 10:30 AM	4	
	10:30 AM - 11:00 AM	4	

Table 3 shows that during the weekday, the maximum utilization rate for the Workbar and “Mill Building” tenants is lowest in the morning and highest in the midday period. During the weekday, the highest number of spaces occupied during midday was 52. As this number represents the occupancy for the combined uses, it is necessary to determine the portion that is allocated to just the Workbar tenants.

The initial methodology outlined in the March 9, 2021 TIR used ITE Parking Land Use Code (LUC) 710 – “General Office Building” to estimate the Workbar parking utilization. This methodology ultimately yielded a parking demand of 23 vehicles at peak utilization.

Upon review of the Town of Arlington’s peer review, the project team reevaluated the parking demand and calculated the peak utilization for the Workbar based on the occupied gross floor area for each site use. It was found that the approximate 17,000 square feet shown on the ALTA survey is only the building footing area for the “Mill Building.” Therefore, we were able to receive the building occupancy data from the Town Assessor’s database, which is included in Appendix I of the revised TIR. The “Mill Building” which comprises four sub-buildings, totals 43,307 square feet of gross floor area. However, the data indicates that only 24,545 square feet of gross floor area was occupied. The Workbar comprised 11,670 square feet of occupied gross floor area. Therefore, the occupied “Mill Building” area represents 68% of the site utilization and the Workbar represents 32% of the site utilization. This results in an increased parking demand for the “Mill Building” and a reduced parking demand for the Workbar.

From this data, we can conclude that Workbar tenants occupied 17 parking spaces during the Weekday mid-day and 1 parking space during the Saturday mid-morning period. Therefore, the 40 parking spaces for during the weekday and 10 spaces on Saturday that will be provided for Workbar will be sufficient to meet the anticipated demand.





### **Comparable Developments**

In addition to the site utilization, Nitsch Engineering initially conducted parking utilization counts at three (3) nearby apartment complexes to determine the parking utilization at similar residential transit-oriented developments in Arlington to determine the future parking required at the site (described in Section 7.6). The following developments were counted:

- Brigham Square Apartments at 30 Mill Street on January 29, 2020 from 6:00 AM to 8:00 AM and 12:00 to 2:00 PM, on January 30, 2020 from 6:00 PM to 8:00 PM, and on February 1, 2020 from 9:00 AM to 11:00 AM;
- Arlington 360 at 4205 Symmes Circle on January 30, 2020 from 12:00 PM to 2:00 PM; and
- The Legacy at Arlington Center at 438 Massachusetts Avenue on February 1, 2020 from 9:00 AM to 2:00 PM.

To obtain the peak parking demand at the other developments in addition to our own on-site observations, the management companies were contacted to obtain parking information, including the total number of spaces provided and the number of spaces reserved. It should be noted that all three developments were operating between 0-3% vacancy at the time the parking counts were collected.

Upon review of the Town of Arlington's peer review, it was assumed that the collected data does not adequately predict peak parking utilization. To address these parking concerns, the team took an additional three-step approach to confirm the parking utilizations used in the previous TIR. Knowing that we were not able to conduct individual counts at Arlington 360, we received updated parking utilization data from Greystar, the building's management company. The data, included in Appendix C, is consistent with our initial findings in stated in the revised March 9, 2021 TIR.

To obtain the time-of-day parking utilization for the Legacy, the management company was able to have the parking counts recounted internally for the following dates and times:

- Saturday, April 17, 2021 from 9:00 AM to 11:00 AM
- Tuesday, April 20, 2021 from 6:00 AM to 8:00 AM, 12:00 PM to 2:00 PM, 6:00 PM to 8:00 PM, and 11:00 PM to 1:00 AM (Wednesday)

The information from Legacy was used to obtain the peak parking utilization as well as the utilization reduction during the Weekday mid-day period.

To confirm the peak utilization for the Brigham Square Apartments, which was not believed to be obtained from the initial counts, we conducted an additional night count on Tuesday, April 20, 2021 from 11:00 PM to 1:00 AM (Wednesday). As expected, the peak utilization obtained from the Weekday morning counts represents the peak throughout the day. The Weekday night counts were slightly less than the Weekday morning, so the peak utilization used in the previous calculations was used for the revised calculations.

Table 4 summarizes the parking count data at nearby apartment complexes and compares the previous TIR to the current calculations.

**Table 4 – Apartment Complex Parking Utilization Assessment Summary**

	Location			Average
	The Legacy at Arlington Center	Brigham Square Apartments	Arlington 360	
March 9, 2021 Traffic Impact Report				
Total Parking Spaces	155	153	284	
Number of Bedrooms	247	179	241	
Peak Parking Observed	83	99	182	
Peak Parking Utilization (spaces/bd)	0.34	0.55	0.76	0.55
April 30, 2021 Traffic Impact Report				
Total Parking Spaces	155	153	282	
Number of Bedrooms	247	179	241	
Peak Parking Observed	100	99	175	
Peak Parking Utilization (spaces/bd)	0.40	0.55	0.73	0.56

As shown in Table 4, the peak parking utilization calculated from the new data is for the most part consistent with the data collected in February 2020 which is presented in the March 9, 2021 TIR. The average peak utilization of 0.56 spaces/bedroom yields an anticipated parking demand of 105 vehicles.

To obtain the parking utilization reduction during the Weekday mid-day and Saturday mid-morning, we used the two new sources for time-of-day data (The Legacy and Brigham). We used the average of the new datasets and found the utilization reduction is consistent with the previous calculations; 18% reduction during the Weekday mid-day and 10% reduction during the Saturday mid-morning. Parking data calculations are provided in Appendix C.

## 4 Safety Analysis

### 4.1 Historical Data

We researched the crash data within the study area for the three (3) most recent years available from the MassDOT records, 2016 to 2018. Table 5 summarizes the crash statistics for the seven study intersections.

**Table 5 – Crash Statistics**

Location	Number of Crashes			Severity				Manner of Collision				Incl. Ped/ Bike <sup>i</sup>	Percent During	
	Year	Total Crashes	Annual Average	PD <sup>a</sup>	PI <sup>b</sup>	NR <sup>c</sup>	F <sup>d</sup>	A <sup>e</sup>	RE <sup>f</sup>	HO <sup>g</sup>	Other <sup>h</sup>		Peak Hours <sup>k</sup>	Wet/Icy Conditions
Massachusetts Avenue and Appleton Street/ Appleton Place/ Commercial Driveway	2016	3	1.7	2		1					3		33%	
	2017	2		2				1	1					50%
	2018	0												
	<b>Total</b>	<b>5</b>		<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>20%</b>	<b>20%</b>
Massachusetts Avenue and Forest Street/ Burton Street/ West Driveway	2016	0	0.3											
	2017	1				1			1					
	2018	0												
	<b>Total</b>	<b>1</b>		<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>
Massachusetts Avenue and Pine Court	2016	0	0.3											
	2017	0												
	2018	1			1			1					100%	100%
	<b>Total</b>	<b>1</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>100%</b>
Massachusetts Avenue and Quinn Road	2016	0	0.0											
	2017	0												
	2018	0												
	<b>Total</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>
West Driveway and Quinn Access Road	2016	0	0.0											
	2017	0												
	2018	0												
	<b>Total</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>
Forest Street and Ryder Street/ Peirce Street	2016	0	0.3											
	2017	0												
	2018	1		1				1						
	<b>Total</b>	<b>1</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>
Ryder Street and Ryder Street Driveway	2016	0	0.0											
	2017	0												
	2018	0												
	<b>Total</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>

<sup>a</sup>Property Damage Only; <sup>b</sup>Personal Injury Only (non-Fatal Injury); <sup>c</sup>Not Reported; <sup>d</sup>Fatality; <sup>e</sup>Angle; <sup>f</sup>Rear-end; <sup>g</sup>Head-on; <sup>h</sup>Sideswipe, opposite direction; sideswipe, same direction, single vehicle crash, rear-to-rear, not reported, unknown, etc.; <sup>i</sup>Includes pedestrian or cyclist; <sup>k</sup>Occurred between 7-9am or 4-6pm

A total of 8 crashes were reported within the study area from 2016 to 2018. There were no reported crashes at the intersections of Massachusetts Avenue and Quinn Road, Mirak Innovation Park West Driveway and Quinn Access Road, and Ryder Street and Mirak Innovation Park Ryder Street Driveway during the study period. In terms of severity, one (1) crash in the study area reported personal injury, four (4) crashes were reported as property damage only, and there were no crashes with fatalities. Angle and sideswipe crashes were the most frequent type of crash with a total of three (3) crashes each, and there were two (2) rear-end crashes. No crashes involving pedestrians or bicycles were reported. Twenty-five percent of all crashes in the study area occurred during peak hours, and 25% of all crashes occurred under wet/icy conditions.

Crash rates for intersections are expressed by the number of crashes per million entering vehicles (MEV). Table 6 compares the crash rates for the study intersections with the Statewide and District 4 averages. The intersection crash rate calculations are included in Appendix D.

**Table 6 – Crash Rate Summary**

Location	Facility Type	Number of Crashes <sup>a</sup>	Crash Rate <sup>b</sup>	Average Rates <sup>b,c</sup>		Comparison to Average Rates	
				District 4	Statewide	District 4	Statewide
Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway	Unsignalized Intersection	5	0.30	0.73	0.78	Below	Below
Massachusetts Avenue and Forest Street/Burton Street/West Driveway	Unsignalized Intersection	1	0.05	0.57	0.57	Below	Below
Massachusetts Avenue and Pine Court	Unsignalized Intersection	1	0.07	0.57	0.57	Below	Below
Massachusetts Avenue and Quinn Road	Unsignalized Intersection	0	0.00	0.57	0.57	Below	Below
West Driveway and Quinn Access Road	Unsignalized Intersection	0	0.00	0.57	0.57	Below	Below
Forest Street and Ryder Street/Peirce Street	Unsignalized Intersection	1	0.13	0.57	0.57	Below	Below
Ryder Street and Ryder Street Driveway	Unsignalized Intersection	0	0.00	0.57	0.57	Below	Below
<sup>a</sup> Based on 3-year crash history from MassDOT, 2016-2018							
<sup>b</sup> Intersections: Crashes per million entering vehicles (MEV),							
<sup>c</sup> Based on latest MassDOT crash data website							

The crash rates at all study intersections are all well below the District 4 and Statewide averages.

## 4.2 2020 Crashes

As historical data is only available through 2018, crashes in 2019 and 2020 were not captured in the Safety Analysis. However, it is important to note that in May 2020, a fatal collision involving a bicyclist occurred at the intersection of Massachusetts Avenue and Appleton Street/Appleton Place and in June 2020, a non-fatal vehicle crash occurred at the intersection of Massachusetts Avenue and Forest Street/Burton Street/West Driveway.

While the details of the crashes were not available at the time of this study, it is evident that these locations experience serious safety issues related to bicyclist and motorist conflicts. Intersection geometry, limited on-street bicycle facilities, flashing traffic signal equipment, congestion, and other inhibiting factors could all contribute to the safety issues at these intersections. Since the initial submission of the TIR in July 2020, the Town has been working with a traffic consultant to conduct a Road Safety Audit to evaluate the intersections and determine the most appropriate mitigation measures.

## 5 Sight Distance

Stopping Sight Distance (SSD) is the length of the roadway ahead that is visible to the driver and should be long enough to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path. Stopping sight distance is the sum of the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the instant the brakes are applied, and the distance needed to stop the vehicle from the instant brake application begins.

Intersection Sight Distance (ISD) is the length of the leg of the departure sight triangle along the major road in both directions for a vehicle stopped on the minor road waiting to depart. The critical departure sight triangles for both the Bank's driveway at Derby Street and the Driveway at Peabody Street are for traffic approaching from either the left or right. The SSD and ISD values associated with a given design speed are shown in Table 7.

**Table 7 – Sight Distance Criteria**

DESIGN SPEED (MPH)	DESIGN STOPPING SIGHT DISTANCE VALUE <sup>1</sup> (FT)	RECOMMENDED INTERSECTION SIGHT DISTANCE VALUE <sup>2</sup> (FT)
15	80	170
20	115	225
25	155	280
30	200	335
35	250	390
40	305	445
45	360	500
50	425	555
55	495	610
60	570	665
65	645	720
70	730	775
75	820	830
80	910	885
Source: <i>A Policy on Geometric Design of Highways and Streets, AASHTO, Washington DC (2011)</i>		
<sup>1</sup> Design value based on a grade of less than 3%, a brake reaction distance predicted on a time of 2.5 seconds and a deceleration rate of 11.2 ft/s <sup>2</sup>		
<sup>2</sup> Recommended value based on Case B1 - a stopped passenger car to turn left onto a two-lane highway with no median and grades 3% or less		

The posted speed limit for Massachusetts Avenue is 30 MPH and for Ryder Street is 25 MPH. According to their respective speed limit the sight distances were selected for comparison between the site measured and the calculated. For both streets, sight distance was measured at approximately 10 feet from the edge of pavement based on observed driving behavior. Table 8 summarizes the sight distance evaluation.

**Table 8 – Sight Distance Evaluation**

Intersecting Street	Stopping Sight Distance (SSD)			Intersection Sight Distance (ISD)		
	Traveling	Calculated	Measured	Looking	Calculated	Measured
Mass Ave and W Driveway	EB	200'	>500'	Right	335'	>500'
	WB	200'	>500'	Left	335'	>500'
Mass Ave and Quinn Road	EB	200'	>500'	Right	335'	>500'
	WB	200'	>500'	Left	335'	>500'
Ryder St and Ryder Driveway	EB	155'	105'	Right	280'	360'
	WB	155'	360'	Left	280'	105'


As shown in Table 8, SSD is adequate for both eastbound and westbound traffic at the Massachusetts Avenue driveway. Traffic calming measures are proposed by way of a speed table on Ryder Street at the driveway to reduce speed and compensate for the limited sight distance to the west.

## 6 Signal Warrant Analysis

We conducted traffic signal warrant analyses for the two (2) unsignalized driveways for Mirak Innovation Park along Massachusetts Avenue to determine whether signalization might be justified. We used the 2020 ATR volumes for Massachusetts Avenue, Forest Street, Burton Street, Mirak Mill Ryder Street Driveway, and Quinn Road to analyze the intersections of Massachusetts Avenue at Forest Street/Burton Street/Mirak Mill Ryder Street Driveway and Massachusetts Avenue at Quinn Road (Mirak Innovation Park East Driveway).

The current MUTCD contains nine (9) traffic signal warrants, at least one of which should be satisfied to justify the installation of a traffic signal at a location. Satisfying one or more warrants, however, does not necessarily require the installation of a traffic signal. The traffic signal warrants are:

- Warrant 1: Eight-Hour Vehicular Volume;
- Warrant 2: Four-Hour Vehicular Volume;
- Warrant 3: Peak Hour;
- Warrant 4: Pedestrian Volume;
- Warrant 5: School Crossing;
- Warrant 6: Coordinated Signal System;
- Warrant 7: Crash Experience;
- Warrant 8: Roadway Network; and
- Warrant 9: Intersection Near a Grade Crossing.



We conducted the signal warrant analysis using the procedures contained in the MUTCD. Not all warrants are applicable to all intersections, and data availability may limit which warrants can be evaluated. For this analysis, we evaluated three warrants: eight-hour vehicular volume, four-hour vehicular volume, and peak hour volume.

Based on our analysis of existing conditions, the intersection of Massachusetts Avenue at Quinn Street did not meet any of the warrants. However, the intersection of Massachusetts Avenue at Forest Street/Burton Street/ West Driveway met all three (3) evaluated warrants. As shown in our Capacity Analysis in Section 8.5, the proposed project does not significantly degrade intersection operations that would warrant the proponent to install a new traffic signal. The Project Team has learned that the Select Board has approved the creation of a design review committee to study both short-term and long-term improvements at the intersection of Appleton Street/Appleton Place and Massachusetts Avenue.

Appendix E includes the signal warrant analysis worksheets.

## **7 Future No-Build Traffic Conditions**

Nitsch Engineering used the 2020 existing traffic volumes as the baseline for projecting traffic volumes to future 2025 No-Build conditions. To determine future 2025 conditions, the following steps are included:

- Project existing 2020 traffic volumes five (5) years in the future to the horizon year (2025) using an annual background traffic growth factor to account for regional growth;
- Add traffic volumes associated with any planned developments that may impact the study area;
- Include any planned roadway improvements that may affect traffic volumes; and
- Analyze the study area location to determine future traffic operations.

### **7.1 Background Growth**

We reviewed the Town of Arlington's 2015 Master Plan to determine an appropriate growth rate to apply to the 2020 existing traffic volumes. As noted in Table 2.1 in Chapter 2 of the Master Plan, the expected growth from 2020 to 2030 is 3.3%, which equates to an annual 0.33% background growth rate. Understanding that development is increasing in the Greater Boston Area, we selected a conservative rate of 2.0% per year to represent regional background growth of traffic in this area. We applied this growth rate over the 5-year design period for the turning movement data.

### **7.2 Additional Development and Planned Roadway Development**

Nitsch Engineering contacted the Town of Arlington Planning Board to establish any planned developments that will potentially add traffic to the study area who indicated that there are no planned developments or roadway projects in the vicinity that would affect our development.

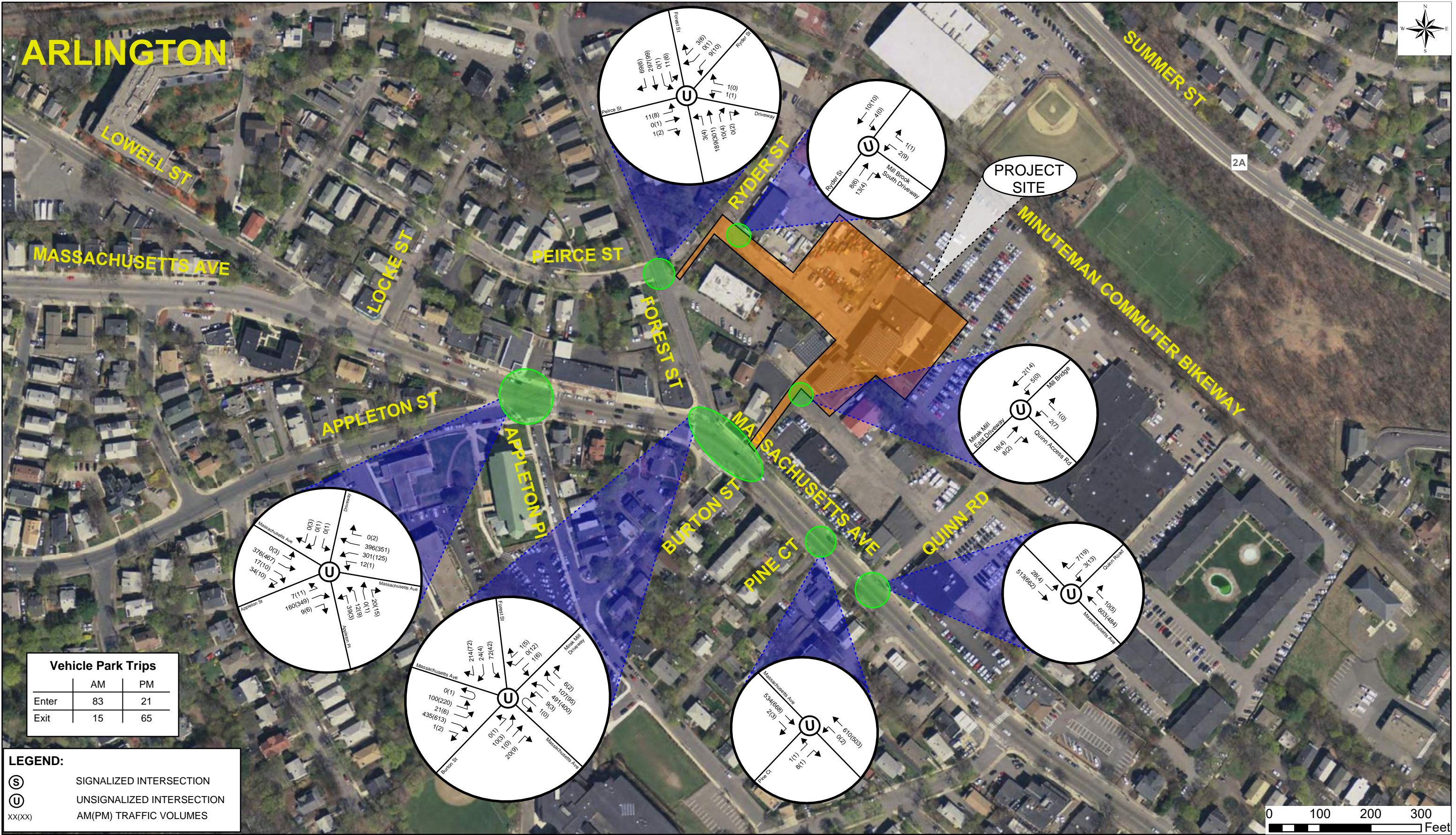
However, in collaboration with the Project team we learned that a 50-unit hotel with ancillary restaurant space will be developed in the vicinity of the Project at 1207 – 1211 Massachusetts Avenue. According to the Traffic Impact Study developed by BSC Group, Inc dated June 2020, the hotel is anticipated to generate an approximate net increase of 18 trips during the weekday morning peak hour and 23 trips during the weekday evening peak hour. For the purposes of the Project Traffic Impact Report, the conservative 2% background growth rate applied to the existing traffic volumes is sufficient to capture the anticipated hotel traffic volume.



**7.3     2025 No-Build Traffic Volumes**

We developed the 2025 No-Build volumes by the applying annual growth rate for five (5) years to the 2020 Existing traffic volumes at the study intersections. Figure 5 presents the peak hour traffic volumes for 2025 No-Build conditions.





**Figure 5: 2025 No-Build Peak Hour Volumes**  
 1165R Mass Ave Apartments  
 Arlington, MA  
 Data Source: MassGIS  
 Nitsch Project #13990.





## 8 Proposed Future Conditions

### 8.1 Proposed 1165R Mass Ave Apartments Site

The proponent proposes to demolish the 3-story building east of Workbar and the 1-story annex building to the north of Mill Brook to develop two (2) new buildings and renovate two (2) existing buildings. The Project will consist of three (3) apartment buildings with 130 dwelling units and one (1) building for amenity space.

#### ***Vehicle Access and Circulation***

To provide an efficient site circulation and limit the impacts to the abutters, wayfinding signage will be placed at the egress approach to the West Driveway (at the Quinn Access Road) and at the ingress approach to the Ryder Street Driveway. The wayfinding signage will indicate that tenants will have ingress-only provided at the West Driveway and egress-only at the Ryder Street Driveway. However, access at the West Driveway will remain ingress and egress for the two abutters, the Mirak Hyundai car dealership and the Robert Annese Law Office. Similarly, access at the Ryder Street Driveway will remain ingress and egress for all abutters. The existing monument ID sign at the end of the West Driveway (at Massachusetts Avenue) will be modified to display resident and Workbar entry only. Access via Quinn Road and the Quinn Access Road will remain two-way for all users. To accommodate two-way traffic and pedestrian traffic from Massachusetts Avenue to the north of Mill Brook, the bridge will have to be reconstructed to include two (2) 10.5-foot travel lanes and a minimum 4-foot wide sidewalk.

Given the low volume of site-generated traffic, especially during the midday hours, access and operations for the abutting businesses will not be significantly impacted. During the weekday midday hours when the abutting businesses are expected to be at a peak, the new development is expected to generate on average 35 vehicles per hour or approximately one vehicle every two minutes. This is not deemed to be a significant amount of traffic affecting access or operations on-site and off-site.


#### ***Parking***

Parking will be provided via 14 spaces in the basement-level garage of Building 2 south of Mill Brook, 110 spaces in the two-level garage of Building 4 north of Mill Brook, and surface parking with eleven (11) spaces, totaling 135 proposed parking spaces. Access to the two-level garage will be provided via a two-way driveway on the south side of the building, and access to the basement-level garage will be provided via a two-way driveway on the east side of the reconstructed southeast building. An shared parking plan has been established to allow Workbar tenants to occupy 40 parking spaces during the weekday business hours and 10 parking spaces at night and on the weekends.

It is anticipated that all parking spaces will be numbered and that all Workbar tenants and residents will have a form of identification (such as a parking sticker or tag) designating reserved and non-reserved spaces within the garage. Resident parking spaces will be leased at market rates. Upon signing a tenant lease agreement or Workbar membership, the user will be given a site circulation diagram along with documentation indicating that they will be penalized if the designated site circulation is not adhered to. An on-site transportation coordinator will be present and responsible for maintaining parking and access compliance.

#### ***Pedestrian and Bicycle Accommodations***

Pedestrian and bicycle accommodations and safety are paramount for a successful development in an urban area. The site has been designed to provide a raised pedestrian sidewalk with guardrail along the south side of the Ryder Street Driveway to separate the vehicular traffic from pedestrian traffic and provide sidewalk access to Ryder



Street, Forest Street, and Massachusetts Avenue. In addition, the main pedestrian entrance to the building complex is separated from the main parking garage entrance and exit to reduce potential conflicts. The proposed raised sidewalk on the new bridge will also provide a safe pedestrian connection over the Mill Brook.

As the site is adjacent to the Minuteman Commuter Bikeway and shared bicycle lanes on Massachusetts Avenue, it is important that the development provide the adequate bicycle accommodations to support the use of bicycles for residents. The development will provide interior bicycle parking for 100 bicycles with repair and maintenance stations. Commuter access to the Minuteman Commuter Bikeway will be provided via Ryder Street, and local bicycle access to Massachusetts Avenue will be provided over the bridge and via Ryder Street.

Figure 6 presents the proposed site access for vehicles, pedestrians, and bicycles.

### ***Explored Alternative Connections***

The Proponent explored different options to provide a direct pedestrian connection from Massachusetts Avenue to the site. The Massachusetts Avenue West Driveway is too narrow (20 feet wide) and too steep (grades up to 12%) to provide pedestrian or bicycle access to the Property. Moreover, the Massachusetts Avenue West Driveway is encumbered by a recorded easement, which grants the abutting properties rights of ingress and egress, preventing the narrowing of the easement for installation of a sidewalk even if such an installation were feasible.

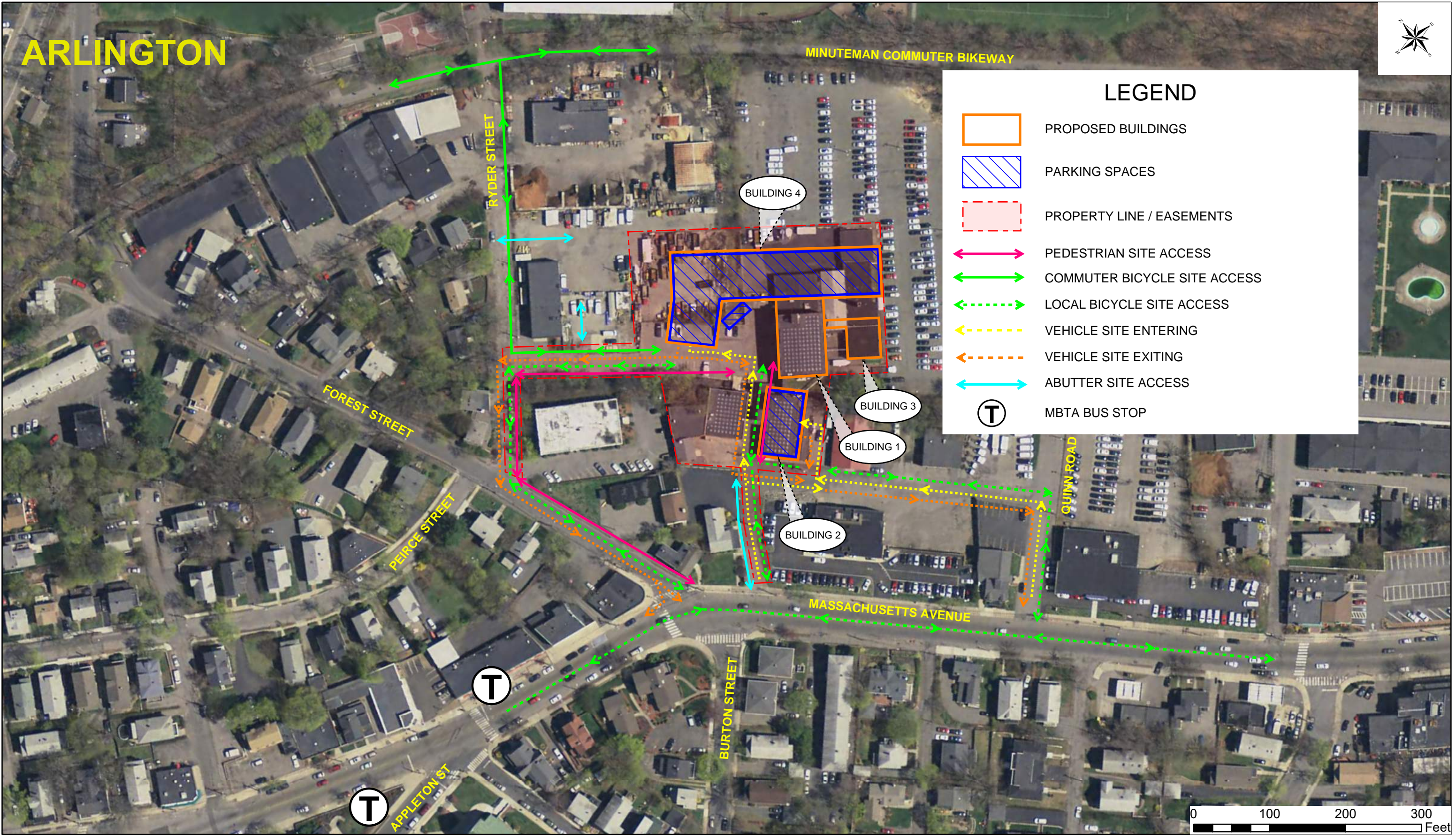
As confirmed by the Town Engineer, Quinn Road is, in fact, a public way and is one of three existing vehicular connections to the Property. The Quinn Road connector driveway is owned by others, but the Proponent has access rights from the Property to the Quinn Road. As such, the proponent does not have rights to modify the connector driveway to accommodate pedestrian access.

Based upon multiple meetings with the neighborhood group, the Proponent is proposing extensive improvements to the south of the Ryder Street exit of the Property, including: (a) repaving the existing paved surface from the Ryder Street exit of the Property to Forest Street; (b) reconstructing the existing sidewalk from the Ryder Street exit of the Property to Forest Street to create an accessible connection, including new crosswalks and wheel chair ramps at the 9 Ryder Street driveway curb cut; (c) the insertion of a new crosswalk and wheelchair ramps at Ryder and Forest Streets; and (d) a speed table on Ryder Street at the intersection with the Ryder Street exit driveway.

The Applicant does not have any rights with respect to the private way on Ryder Street from the Ryder Street exit to the Minuteman Commuter Bikeway. Any improvements to that segment of Ryder Street should be required of the of the abutting property owners at 15 Ryder Street, 33 Ryder Street, and the other commercial businesses that use the private right-of-way for vehicular access.

With respect to the utility pole within the Massachusetts Avenue West Driveway, the Proponent investigated relocating the pole and discussed relocation with the utility company. Power service for the new residential project will be provided from Ryder Street, not via the Massachusetts Avenue West Driveway. The existing utility pole on the Massachusetts Avenue West Driveway is owned by the utility company and provides power and data services to the abutting property owners. The relocation is not feasible for the following reasons: (a) the pole would need to be moved by the utility company and located on another property owner's property; (b) relocation of the pole would trigger the need to move connecting utility poles servicing businesses on the Quinn Road connector and the Massachusetts Avenue West Driveway, as well as relocation of poles on Massachusetts Avenue to meet current utility company standard; and (c) the costs associated with the reworking and relocation of the poles would be substantial, would not address the power needs for the project, would render the project economically unfeasible if imposed on the project, and presumably would not be a cost the abutters would consider incurring.





**Figure 6: Site Access Diagram**

1165R Mass Ave Apartments

Arlington, MA

Data Source: MassGIS

Nitsch Project #13990.



## 8.2 Trip Generation

As the existing “Mill Building” will be eliminated, and replaced with the apartment complex, a trip generation credit must be applied to accurately determine the traffic impacts. Therefore, we calculated the trip generation for the existing use and the proposed use to obtain the net trip generation. Standard methodology for determining trip generation of a site is to use the ITE *Trip Generation, 10<sup>th</sup> Edition*<sup>2</sup> (“the ITE method”).

For the existing “Mill Building” we used Land Use Code (LUC) 710 – “General Office Building.” The trip generation rate for the independent variable “1,000 square feet of gross floor area” was applied to the 24,545 square feet of occupied floor area.

For the new apartment complex, we used LUC 221 – “Multifamily Housing (Mid-Rise)”, which includes apartments, townhouses, and condominiums located within the same building with at least three (3) other dwelling units and between three (3) and 10 levels (floors) of residence. Table 9 represents the total unadjusted peak hour trip generation. The ITE Trip Generation worksheets are included in Appendix F.

**Table 9 – Peak Hour Trip Generation**

Period	Direction	ITE Office Trips (24,545 SF)	ITE Housing Trips (130 units)	Net Project Trips
Weekday Morning	Enter	31	9	-22
	Exit	5	38	33
	<b>Total</b>	<b>36</b>	<b>47</b>	<b>11</b>
Weekday Evening	Enter	6	46	40
	Exit	31	22	-9
	<b>Total</b>	<b>37</b>	<b>68</b>	<b>31</b>

Table 9 shows that the weekday morning entering and weekday evening exiting trips generated from the proposed development are less than the trips generated from the existing land use, resulting in a net negative projected trip number. To accurately represent the overall trip generation for the Innovation Park, it is acceptable to apply the negative number.

### **Mode Share**

Based on the Census Tract 3566.01 data, 74% of commuters use a car as the primary travel mode. With the heavy traffic and the high cost of owning a car, urban areas recently have been seeing a significant drop in automobile uses and an increase in use of public transit, bicycling, and walking. For this site, with its proximity to the Minuteman Commuter Bikeway and the MBTA Bus Route 79, which both have direct connections to Alewife Station, it is expected that the number of bicyclists and public transit users would be higher than average for its census tract, resulting in a lower number of vehicle (car) trips. In addition, it is anticipated that changes to

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<sup>2</sup> *Trip Generation*, Institute of Transportation Engineers, 10th Edition, 2017, Washington, D.C.



employer operations during the COVID-19 pandemic will persist to some degree after the pandemic, increasing the number of employees who will work from home compared to before the pandemic.

However, to provide a conservative traffic analysis, we used the Census Tract data with the higher rate for cars. For this assessment, we adjusted mode share and applied it to the net trip generation, as shown in Table 10.

**Table 10 – Mode Share for 1165R Mass Ave Apartments (Net Trip Generation)**

Mode	Census Tract 3566.01	Weekday Morning			Weekday Evening		
		Enter	Exit	Total	Enter	Exit	Total
CAR	74%	-16	24	8	30	-7	23
TRANSIT	21%	-5	7	2	8	-2	6
BICYCLE	1%	0	0	0	0	0	0
WALK	2%	-1	1	0	1	0	1
TAXI	0%	0	0	0	0	0	0
WORK FROM HOME	2%	0	1	1	1	0	1
<b>Total</b>	<b>100%</b>	<b>-22</b>	<b>33</b>	<b>11</b>	<b>40</b>	<b>-9</b>	<b>31</b>

To obtain the projected traffic volume that will be added to the roadway network, the appropriate vehicle occupancy rates should be applied to car-person trips shown in Table 10. However, as the net number of car trips are low, a vehicle occupancy rate of 1.0 persons per car was used to provide a conservative analysis.

### 8.3 Trip Distribution

We based the additional peak-hour trips to/from the site using the existing directional distribution based on our traffic counts as shown in Table 11.

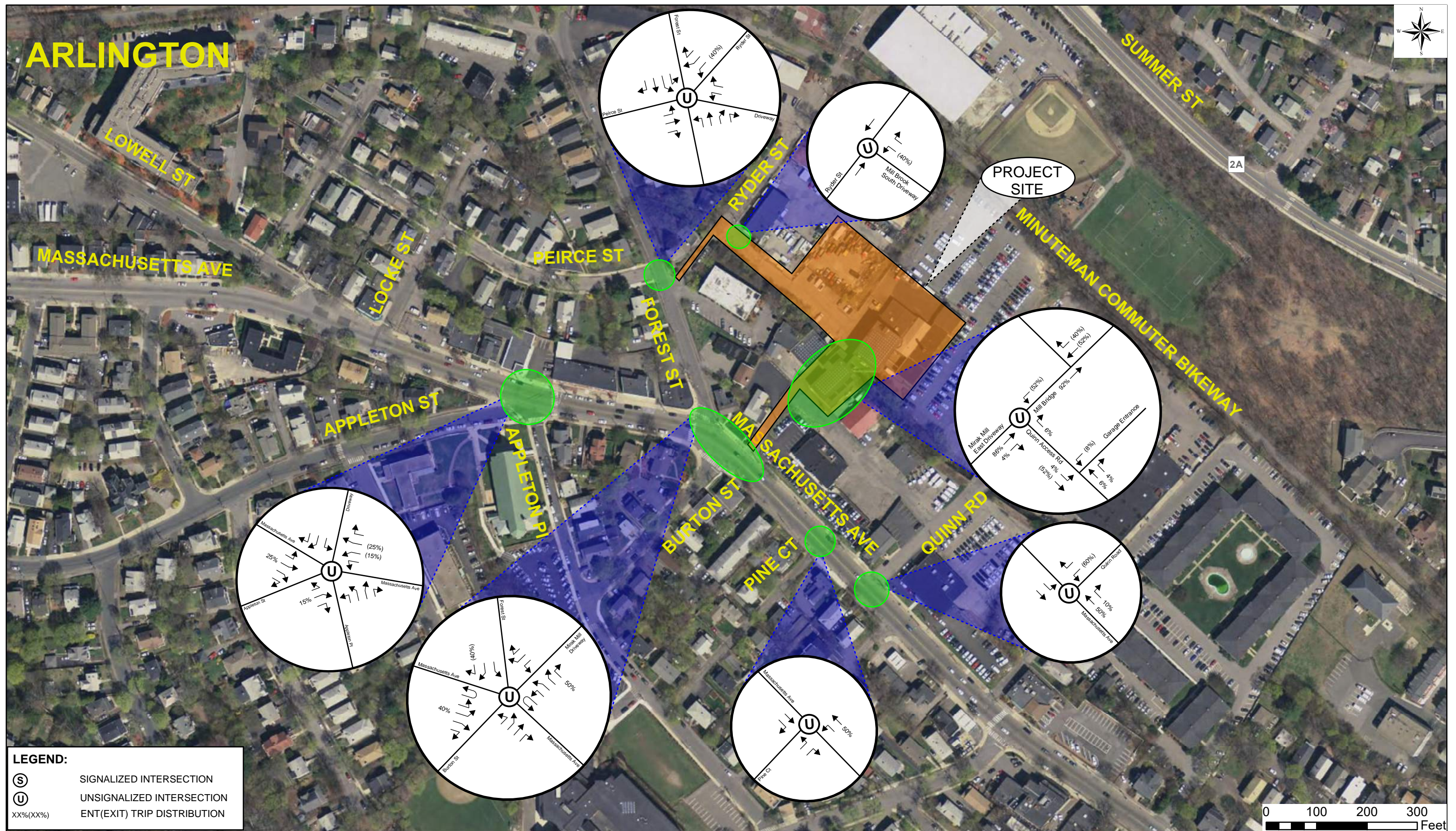
**Table 11 – Trip Distribution**

Direction and Roadway	Percentage
To/From East on Massachusetts Avenue	60%
To/From West on Massachusetts Avenue	25%
To/From Southwest on Appleton Street	15%
<b>Total</b>	<b>100%</b>
Source: Figure 3: 2020 Existing Peak Hour Volumes	

### 8.4 Trip Assignment

We assigned the new peak-hour trips to the study intersections by multiplying the quantity of new trips from Table 10 by the Trip Distribution percentages shown in Figure 7. The resultant new trip assignment volumes are shown in Figure 8.





**Figure 7: Trip Distribution**

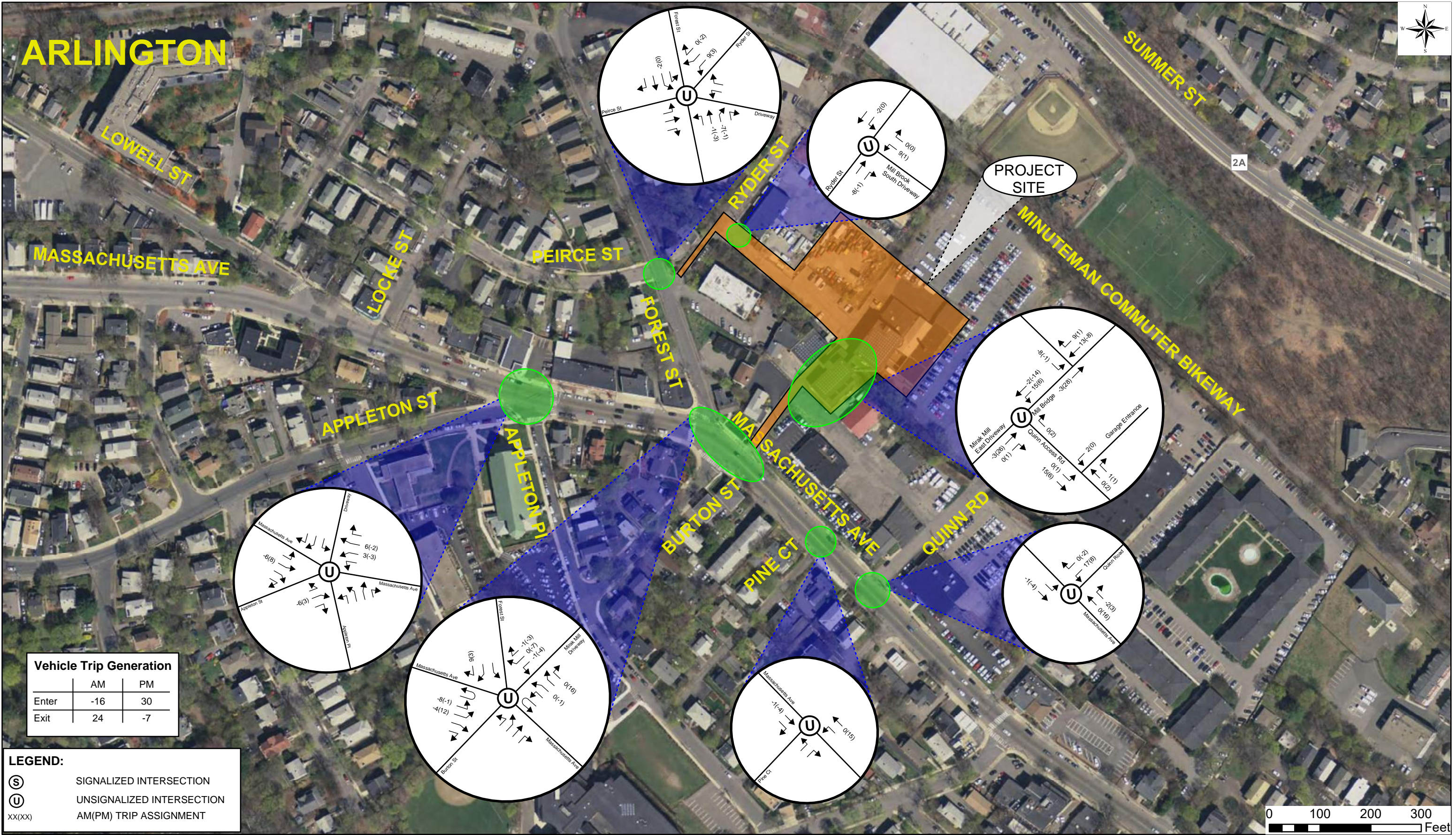
1165R Mass Ave Apartments

Arlington, MA

Data Source: MassGIS

Nitsch Project #13990.





**Figure 8: Net Trip Generation Assignment**

1165R Mass Ave Apartments

Arlington, MA

Data Source: MassGIS

Nitsch Project #13990.



As noted in Section 8.1, vehicle circulation and access for the site will change with the use therefore changing the overall Mirak Innovation Park trip distribution. The overall Park trips at the driveways are compared in Table 12.

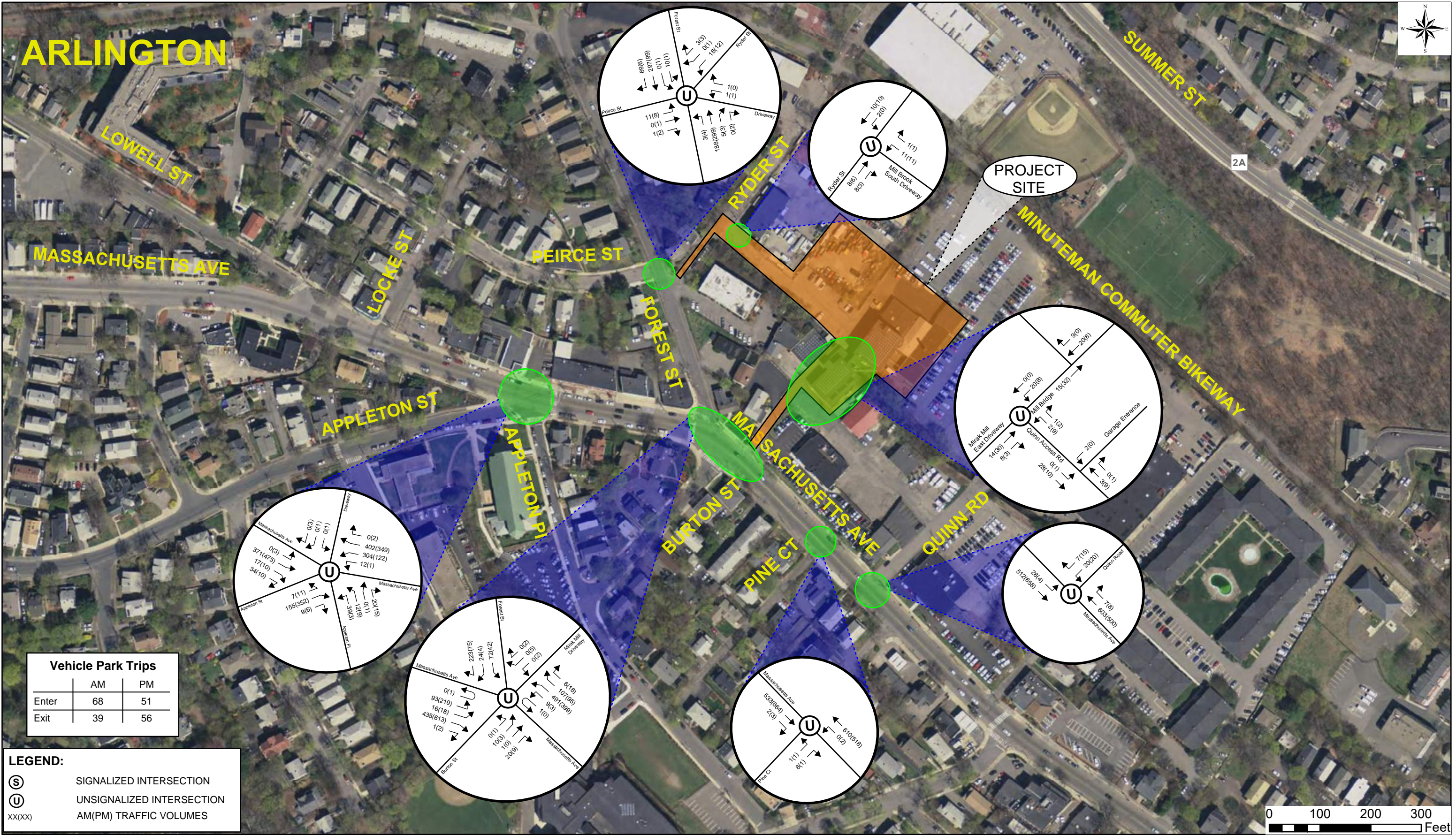
**Table 12 – Driveway Volume Comparison**

Driveway	Weekday Morning						Weekday Evening					
	2020 Existing			2025 Build			2020 Existing			2025 Build		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
West Driveway	28	2	30	23	0	23	8	23	31	36	9	45
Quinn Road	38	10	48	35	27	62	9	32	41	12	35	47
Ryder Street Driveway	18	3	21	10	12	22	4	10	14	3	12	15
<b>Total</b>	<b>84</b>	<b>15</b>	<b>99</b>	<b>68</b>	<b>39</b>	<b>107</b>	<b>21</b>	<b>65</b>	<b>86</b>	<b>51</b>	<b>56</b>	<b>107</b>

## 8.5 2025 Build Traffic Volumes

We added the Trip Assignment volumes from Figure 8 to 2025 No-Build conditions traffic volumes from Figure 5 to yield the 2025 Build conditions peak-hour traffic volumes, which are shown in Figure 9.





**Figure 9: 2025 Build Peak Hour Volumes**  
1165R Mass Ave Apartments  
Arlington, MA  
Data Source: MassGIS  
Nitsch Project #13990.



## 8.6 Parking Generation

To determine the required amount of parking needed for the proposed development, we compared the parking rates from the Town of Arlington Zoning Board of Appeals (ZBA), the Town of Arlington Master Plan, the ITE *Parking General Manual*, 5th Edition, and the parking utilization study. For the ITE rates, we used Land Use Code 221 “Multifamily Housing (Mid-Rise).” Given the proposed apartment mix, it was determined the best means to calculate parking would be to use the number of bedrooms as the independent variable. From the data we collected from comparable developments in the Town, we found that average peak parking utilization in the area is 0.56 spaces per bedroom (see Table 4 in Section 3.3). The parking rate comparisons are shown in Table 13 below.

**Table 13 – Parking Requirement Comparisons**

Type	# of Units	# of Bed	ZBA		Master Plan		ITE		Study	
			Rate/unit	# of spaces	Rate/unit	# of spaces	Rate/bed	# of spaces	Rate/bed	# of spaces
Studio	31	31	1	31	1.5	47	0.75	23	0.56	17
1-Bedroom	55	55	1.15	63	1.5	82	0.75	41	0.56	31
2-Bedroom	31	62	1.5	47	1.5	47	0.75	47	0.56	35
3-Bedroom	13	39	2	26	1.5	19	0.75	29	0.56	22
<b>Total</b>	<b>130</b>	<b>187</b>	-	<b>167</b>	-	<b>195</b>	-	<b>140</b>	-	<b>105</b>

To calculate the total required spaces in combination with the Workbar, we applied the parking utilization factors discussed in Section 3.3. The 18% Weekday mid-day parking utilization reduction was applied to the number of required apartment spaces and added to the calculated Workbar parking demand, yielding a total parking demand of 103 vehicles (107 vehicles in previous TIR). During the Saturday mid-morning, the calculated parking demand based on a 10% reduction is 96 vehicles (95 vehicles in previous TIR). When adding the required 40 Workbar parking spaces during the Weekday mid-day to the apartments’ demand, 126 parking spaces will be required. Adding the 10 Workbar parking spaces to the Saturday mid-morning demand, 104 parking spaces will be required. The parking garage layouts for Buildings 2 and 4 which provide 124 parking spaces in addition to the 11 surface parking spaces will be sufficient to meet the anticipated demand. A summary of the future parking generation is shown in Table 14.

**Table 14 – Future Parking Generation**

Items		Quantity	
1	Number of proposed bedrooms	187 bedrooms	
2	Required apartment spaces (based on 0.56 spaces/bedroom)	103 spaces	
		Weekday Midday	Saturday Mid-morning
3	Anticipated occupied apartment spaces (based on study utilization)	86 spaces (82%)	94 spaces (90%)
4	Calculated required Workbar spaces (from Section 3.3)	17 spaces	1 space
5	Contracted required Workbar spaces	40 spaces	10 spaces
6	<b>Total calculated required net spaces (rows 3 + 4)</b>	<b>103 spaces</b>	<b>95 spaces</b>
7	<b>Total contract required spaces net spaces (rows 3 + 5)</b>	<b>126 spaces</b>	<b>104 spaces</b>

## 8.7 Construction Management Outline

During construction of the development, no long-term detours or lane closures at any of the study intersections or study roadways is anticipated.

During construction, pedestrian accessibility should be maintained. If necessary, temporary crosswalks and ramps should be provided. All pedestrian accommodations should adhere to Massachusetts Architectural Access Board (MAAB) and Americans with Disabilities Act (ADA) guidelines.

A Construction Management Plan will be provided for review and approval by the Town of Arlington prior to the commencement of construction.

## 9 Traffic Operations Analysis

### 9.1 Evaluation Criteria

Traffic operations at intersections are evaluated using the performance measures of average vehicular delay, level of service (LOS), volume-to-capacity (v/c) ratio, and average and 95th percentile queue lengths.


LOS is a qualitative measure that describes operating conditions through letter designations, from A to F. It is defined for intersections in terms of average control delay per vehicle. LOS A indicates the most favorable condition, with minimum traffic delay. LOS F represents the worst condition where there is significant traffic delay. LOS D or better is typically considered desirable for peak-hour operation in urban and suburban settings. The delay designations for each LOS level differ slightly between signalized and unsignalized intersections due to driver expectations and behavior. Table 15 summarizes the LOS criteria for intersections as used in this analysis.

**Table 15 – Intersection Level of Service Criteria**

Level of Service	Average Control Delay (sec/veh)	
	Signalized	Unsignalized
A	0-10	0-10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50
Source: HCM 2000		

For signalized intersections, LOS is reported by lane group, by approach, and for the entire intersection. For unsignalized intersections, the analysis assumes that the traffic on the mainline is not affected by traffic on the side street. As such, an unsignalized intersection's LOS is generally reported for left turns on the mainline and all side street movements, and an overall intersection LOS is not determined.

The v/c ratio is a measure of congestion at an intersection approach. The capacity of a facility is the maximum hourly rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway under prevailing roadway, traffic, and control conditions. A v/c ratio below one indicates that the



intersection approach has adequate capacity to serve the arriving traffic demand. A v/c ratio that approaches or exceeds 1.0 indicates traffic congestion or poor operating conditions. In that situation, vehicles arrive faster than they can be served, so queue lengths can theoretically grow indefinitely, which is the unstable condition.

Since arrival volumes fluctuate throughout the peak hour, queue lengths vary. The average (50th percentile) queue length represents the maximum back of queue on a typical cycle for a signalized intersection. Average queue lengths are not reported for unsignalized intersections. The 95th percentile queue, reported for both signalized and unsignalized intersections, occurs with 95th percentile traffic volumes, and its length commonly denotes the farthest extent of the vehicle queue.

## 9.2 Capacity Analyses

We performed capacity analyses for the study intersections under 2020 Existing conditions, 2025 No-Build conditions, and 2025 Build conditions during the weekday morning and evening peak hours using Trafficware's Synchro 10 software. Synchro uses, in part, the traffic operational analysis methodology of the Transportation Research Board's *Highway Capacity Manual* (HCM).<sup>3</sup> We generated the results of the capacity analyses using Synchro's Percentile Delay Method for delay, v/c ratio, and queue lengths, supported by HCM 2000 methodology for unsignalized intersection analysis.

Synchro software has limitations preventing modeling of five-legged complex unsignalized intersections such as the intersection of Massachusetts Avenue at Appleton Street, Appleton Place, and the commercial driveway and the intersection of Massachusetts Avenue at Forest Street, Burton Street, and the Mirak Innovation Park West Driveway. Therefore, the two five-legged intersections were each modeled as two smaller, separate intersections (nodes) and combined.


For each of the five-legged intersections, we determined a logical grouping to model the two nodes. At the intersection of Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway, we modeled Appleton Street and Appleton Place separately from the two legs of Massachusetts Avenue and the Commercial Driveway, with a short, imaginary roadway segment connecting them. Likewise, at the intersection of Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway, we modeled the west leg of Massachusetts Avenue Forest Street, and Burton Street separately from the east leg of Massachusetts Avenue and Mirak Innovation Park West Driveway, with a short roadway segment connecting them, mimicking the actual layout.

Each movement across the overall intersection requires a movement at one or both nodes. To calculate the average delay for each approach across the full intersection, we performed the following steps:

1. Multiply the average delay on Approach A from the Synchro output for the associated node by the number of vehicles on Approach A, which gives the total delay on Approach A attributable to movements at only that one node.

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<sup>3</sup> *Highway Capacity Manual 2000 (HCM 2000)*, Transportation Research Board, Washington, D.C., 2000.

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2. For the overall movements on Approach A that involve the other node, multiply the average delay on the associated approach at the other node by the number of vehicles making those movements from Approach A, which gives the total delay on Approach A attributable to movements at the other node.
  3. Add the two total delay numbers together to get the total delay on Approach A through the full intersection.
  4. Divide the total delay on Approach A through the full intersection by the number of vehicles on Approach A to get the average delay per vehicle on the approach.

While the results of this method may not accurately represent the vehicle queuing, the intersection delay and operations represent the field observations. The calculations are included in Appendix G.

Based on the HCM, the critical gap timing, which is crucial in determining the Percentile Delay Method, is related to speed. During the peak hour, it was observed that speeds were significantly lower than the posted speed limit due to heavy density, therefore the peak hour critical gaps along Massachusetts Avenue are less than the off-peak hours. As such, the critical gap timing input data for this Synchro capacity analysis has been calibrated to accurately represent the peak hour traffic conditions.

The Synchro output sheets for the capacity analyses are included in Appendix H.


### **9.2.1 2020 Existing Conditions Capacity Analysis**

The first analysis evaluated traffic operations with 2020 existing traffic volumes under existing geometric conditions and signal timing/phasing. We derived peak hour factors (PHFs) and heavy vehicle percentages from the TMC data. We applied PHFs on an approach-by-approach basis, and we applied heavy vehicle percentages by lane group. Table 16 summarizes the capacity analysis results for the 2020 Existing conditions.



**Table 16 – Capacity Analysis Summary: 2020 Existing Conditions**

Location	Direction / Movement <sup>a</sup>	Weekday Morning Peak Hour				Weekday Evening Peak Hour			
		v/c Ratio	Delay <sup>b</sup>	LOS	95th Queue <sup>c</sup>	v/c Ratio	Delay <sup>b</sup>	LOS	95th Queue <sup>c</sup>
Massachusetts Avenue and Appleton Street/ Appleton Place/ Commercial Driveway*	Mass Ave EB - LTRR	0.00	0.1	A	0	0.00	0.1	A	0
	Mass Ave WB - LLTR	0.40	9.4	A	49	0.12	3.5	A	10
	Appleton PI NB - LLTR	0.28	22.8	C	28	0.04	24.1	C	3
	Driveway SB - LLRR	0.00	0.0	A	0	0.07	35.3	E	6
	Appleton St NEB - LLRR	0.50	43.7	E	66	0.40	29.0	D	49
Massachusetts Avenue and Forest Street/ Burton Street/ West Driveway*	Mass Ave EB - LLTR	0.12	3.7	A	10	0.22	5.0	A	21
	Mass Ave WB - LTRR	0.38	0.3	A	0	0.30	0.1	A	0
	Burton St NB - LLTR	0.16	16.2	C	14	0.06	17.2	C	5
	Forest St SB - LLRR	0.88	57.3	F	214	0.40	23.2	C	47
	West Dwy SWB - LTRR	0.02	13.8	B	1	0.06	12.0	B	5
Massachusetts Avenue and Pine Court	Mass Ave EB - TR	0.34	0.0	A	0	0.39	0.0	A	0
	Mass Ave WB - LT	0.00	0.0	A	0	0.00	0.1	A	0
	Pine Ct NB - LR	0.03	11.3	B	2	0.01	13.1	B	1
Massachusetts Avenue and Quinn Road	Mass Ave EB - TL	0.04	1.0	A	3	0.00	0.1	A	0
	Mass Ave WB - TR	0.37	0.0	A	0	0.29	0.0	A	0
	Quinn Rd SB - LR	0.03	12.8	B	3	0.13	13.3	B	11
West Driveway and Quinn Access Road	West Dr WB - LR	0.00	8.8	A	0	0.02	8.8	A	2
	Quinn Access Rd NB - TR	0.03	0.0	A	0	0.01	0.0	A	0
	Quinn Access Rd SB - LT	0.01	5.3	A	1	0.00	0.0	A	0
Forest Street and Ryder Street/Peirce Street	Peirce St EB - LTR	0.05	14.5	B	4	0.02	11.6	B	2
	Ryder St WB - LTR	0.04	14.0	B	3	0.04	11.6	B	3
	Forest St NB - LTR	0.00	0.2	A	0	0.00	0.1	A	0
	Forest St SB - LTR	0.01	0.3	A	1	0.00	0.4	A	0
Ryder Street and Ryder Street Driveway	Ryder St Dwy WB - LR	0.01	9.2	A	1	0.02	8.7	A	1
	Ryder St NB - TR	0.02	0.0	A	0	0.01	0.0	A	0
	Ryder St SB - LT	0.00	2.3	A	0	0.00	0.0	A	0
<sup>a</sup> Direction: NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound; NEB = Northeast-bound, NWB = Northwest-bound, SEB = Southeast-bound, SWB = Southwest-bound Movement: L = Left-turn, T = Through movement, R = Right-turn, LL = Hard Left + Bear Left, RR = Bear Right + Hard Right <sup>b</sup> Average vehicle delay (seconds) <sup>c</sup> 95th percentile queue length in feet, based upon average vehicle length of 25 feet # 95th percentile volume exceeds capacity; queue may be longer; queue shown is maximum after two cycles * Delay and LOS are based on recombination of data from two nodes of a single intersection, v/c ratios and 95th percentile queues based on Synchro output for initial approach									



As shown from Table 16, most approaches to the intersections are expected to operate at LOS A or B during both peak hours, with operational deficiencies (lane groups operating at LOS E or F) at only two (2) intersections:

- Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway; and
- Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway.

At the intersection of Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway, the stop-controlled Appleton Street approach operates at LOS E during the weekday morning peak hour and LOS D during the weekday evening peak hour. The southbound driveway operates at LOS E during both peak hours due to Synchro limitations, but with driveway volumes less than five (5) vehicles per hour, the approach is not as operationally deficient as the results represent. All other movements operate at LOS D or better in both peak hours.

At the intersection of Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway, the stop-controlled Forest Street southbound approach operates at LOS F during the weekday morning peak hour and LOS C during the evening peak hour. Although the critical gap for the southbound approach was adjusted to represent the field condition more accurately, Synchro limitations still represent a delay significantly higher than what was observed during the morning peak hour. All other movements operate at LOS D or better in both peak hours.

### **9.2.2 2020 No-Build Conditions Capacity Analysis**

Under future No-Build conditions, we kept lane geometry and traffic control the same as existing. For all intersections, we applied the 2025 No-Build traffic volumes with the same heavy vehicle percentages and PHFs as existing. Table 17 summarizes the analysis results for 2025 No-Build conditions.

**Table 17 – Capacity Analysis Summary: 2025 No-Build Conditions**

Location	Direction / Movement <sup>a</sup>	Weekday Morning Peak Hour				Weekday Evening Peak Hour			
		v/c Ratio	Delay <sup>b</sup>	LOS	95th Queue <sup>c</sup>	v/c Ratio	Delay <sup>b</sup>	LOS	95th Queue <sup>c</sup>
Massachusetts Avenue and Appleton Street/ Appleton Place/ Commercial Driveway*	Mass Ave EB - LTRR	0.00	0.1	A	0	0.00	0.1	A	0
	Mass Ave WB - LLTR	0.46	11.0	B	62	0.14	3.8	A	12
	Appleton PI NB - LLTR	0.32	25.8	D	34	0.04	28.0	D	3
	Driveway SB - LLRR	0.00	0.0	A	0	0.04	22.4	C	3
	Appleton St NEB - LLRR	0.59	54.3	F	91	0.45	33.9	D	60
Massachusetts Avenue and Forest Street/ Burton Street/ West Driveway*	Mass Ave EB - LLTR	0.14	4.2	A	12	0.25	5.8	A	25
	Mass Ave WB - LTRR	0.42	0.3	A	0	0.01	0.1	A	1
	Burton St NB - LLTR	0.20	18.3	C	19	0.08	19.0	C	6
	Forest St SB - LLRR	1.11	120.5	F	344	0.52	31.2	D	70
	West Dwy SWB - LTRR	0.03	17.8	C	2	0.08	12.8	B	7
Massachusetts Avenue and Pine Court	Mass Ave EB - TR	0.37	0.0	A	0	0.43	0.0	A	0
	Mass Ave WB - LT	0.00	0.0	A	0	0.00	0.1	A	0
	Pine Ct NB - LR	0.03	11.7	B	3	0.01	14.0	B	1
Massachusetts Avenue and Quinn Road	Mass Ave EB - TL	0.04	1.0	A	3	0.01	0.1	A	0
	Mass Ave WB - TR	0.41	0.0	A	0	0.32	0.0	A	0
	Quinn Rd SB - LR	0.04	13.6	B	3	0.15	14.2	B	12
West Driveway and Quinn Access Road	West Dr WB - LR	0.00	8.8	A	0	0.02	8.7	A	1
	Quinn Access Rd NB - TR	0.03	0.0	A	0	0.01	0.0	A	0
	Quinn Access Rd SB - LT	0.01	5.3	A	1	0.00	0.0	A	0
Forest Street and Ryder Street/Peirce Street	Peirce St EB - LTR	0.06	15.5	C	5	0.03	12.2	B	2
	Ryder St WB - LTR	0.04	15.0	B	4	0.05	12.1	B	4
	Forest St NB - LTR	0.00	0.2	A	0	0.00	0.1	A	0
	Forest St SB - LTR	0.01	0.3	A	1	0.01	0.5	A	0
Ryder Street and Ryder Street Driveway	Ryder St Dwy WB - LR	0.01	9.2	A	1	0.02	8.8	A	1
	Ryder St NB - TR	0.02	0.0	A	0	0.01	0.0	A	0
	Ryder St SB - LT	0.00	2.2	A	0	0.00	0.0	A	0

<sup>a</sup> Direction: NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound;

NEB = Northeast-bound, NWB = Northwest-bound, SEB = Southeast-bound, SWB = Southwest-bound

Movement: L = Left-turn, T = Through movement, R = Right-turn, LL = Hard Left + Bear Left, RR = Bear Right + Hard Right

<sup>b</sup> Average vehicle delay (seconds)

<sup>c</sup> 95th percentile queue length in feet, based upon average vehicle length of 25 feet

# 95th percentile volume exceeds capacity; queue may be longer; queue shown is maximum after two cycles

\* Delay and LOS are based on recombination of data from two nodes of a single intersection, v/c ratios and 95th percentile queues based on Synchro output for initial approach

Under 2025 No-Build traffic conditions, most of the intersection operations are expected to remain the same as under 2020 Existing conditions with only two significant changes in approach delays and levels of service.

At the intersection of Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway, the Appleton Street approach and the southbound driveway approach are both expected to decline during the weekday





morning peak hour from LOS E to LOS F. For the Appleton Street approach, the average delay increases by about 10 seconds from 43.7 seconds to 54.3 seconds. During the weekday evening peak hour, the southbound driveway approach improves from LOS E to LOS C. All other approaches remain at LOS D or better, with slight increases in average delays and v/c ratios due to the increased traffic volumes.

**9.2.3 2025 Build Conditions Capacity Analysis**


We performed capacity analyses for the proposed build conditions that account for the change in site use from the existing office building to the proposed apartment complex. Under these future 2025 Build conditions, we kept lane geometry and traffic control the same at all study intersections.

Table 18 summarizes the analysis results for the 2025 Build conditions.

**Table 18 – Capacity Analysis Summary: 2025 Build Conditions**

Location	Direction / Movement <sup>a</sup>	Weekday Morning Peak Hour				Weekday Evening Peak Hour			
		v/c Ratio	Delay <sup>b</sup>	LOS	95th Queue <sup>c</sup>	v/c Ratio	Delay <sup>b</sup>	LOS	95th Queue <sup>c</sup>
Massachusetts Avenue and Appleton Street/ Appleton Place/ Commercial Driveway*	Mass Ave EB - LTRR	0.00	0.1	A	0	0.00	0.1	A	0
	Mass Ave WB - LLTR	0.46	11	B	62	0.14	3.7	A	12
	Appleton PI NB - LLTR	0.32	25.7	D	34	0.04	28.7	D	3
	Driveway SB - LLRR	0.00	0.0	A	0	0.04	22.8	C	3
	Appleton St NEB - LLRR	0.58	53.3	F	87	0.46	34.6	D	60
Massachusetts Avenue and Forest Street/ Burton Street/ West Driveway*	Mass Ave EB - LLTR	0.13	3.8	A	11	0.25	6.0	A	24
	Mass Ave WB - LTRR	0.42	0.3	A	0	0.00	0.34	A	0
	Burton St NB - LLTR	0.20	17.9	C	18	0.08	19.2	C	6
	Forest St SB - LLRR	1.11	118.5	F	349	0.52	30.7	D	71
	West Dwy SWB - LTRR	0.02	21.0	C	1	0.03	12.2	B	2
Massachusetts Avenue and Pine Court	Mass Ave EB - TR	0.37	0.0	A	0	0.43	0.0	A	0
	Mass Ave WB - LT	0.00	0.0	A	0	0.00	0.1	A	0
	Pine Ct NB - LR	0.03	11.7	B	3	0.01	14.1	B	1
Massachusetts Avenue and Quinn Road	Mass Ave EB - TL	0.04	1.0	A	3	0.00	0.1	A	0
	Mass Ave WB - TR	0.41	0.0	A	0	0.33	0.0	A	0
	Quinn Rd SB - LR	0.13	17.9	C	11	0.20	16.1	C	18
West Driveway and Quinn Access Road	West Dr WB - LR	0.00	9.2	A	0	0.02	9.0	A	2
	Quinn Access Rd NB - TR	0.02	0.0	A	0	0.03	0.0	A	0
	Quinn Access Rd SB - LT	0.04	7.6	A	3	0.01	7.3	A	1
Forest Street and Ryder Street/Peirce Street	Peirce St EB - LTR	0.06	15.4	C	5	0.02	12.0	B	2
	Ryder St WB - LTR	0.08	16.0	C	7	0.05	12.3	B	4
	Forest St NB - LTR	0.00	0.2	A	0	0.00	0.1	A	0
	Forest St SB - LTR	0.01	0.3	A	1	0.00	0.1	A	0
Ryder Street and Ryder Street Driveway	Ryder St Dwy WB - LR	0.04	9.4	A	3	0.02	8.8	A	2
	Ryder St NB - TR	0.01	0.0	A	0	0.01	0.0	A	0
	Ryder St SB - LT	0.00	1.9	A	0	0.00	0.0	A	0
<sup>a</sup> Direction: NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound; NEB = Northeast-bound, NWB = Northwest-bound, SEB = Southeast-bound, SWB = Southwest-bound Movement: L = Left-turn, T = Through movement, R = Right-turn, LL = Hard Left + Bear Left, RR = Bear Right + Hard Right <sup>b</sup> Average vehicle delay (seconds) <sup>c</sup> 95th percentile queue length in feet, based upon average vehicle length of 25 feet # 95th percentile volume exceeds capacity; queue may be longer; queue shown is maximum after two cycles * Delay and LOS are based on recombination of data from two nodes of a single intersection, v/c ratios and 95th percentile queues based on Synchro output for initial approach									

Under Build conditions, most of the intersections are expected to operate the same as under No-Build conditions with few minor changes.



At the intersection of Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway, the Appleton Street and southbound driveway approaches are expected to remain at LOS F during the weekday morning peak hour. However, they both experience a slight decrease in average delay of less than a second. All other movements are expected to remain at LOS D or better.

At the intersection of Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway, the Forest Street approach is expected to remain at LOS F during the weekday morning peak hour with delay increased by 1.1 seconds. All other movements are expected to remain at LOS D or better.

## 10 Transportation Demand Management

The Proponent is committed to implementing Transportation Demand Management (TDM) measures to minimize automobile usage and Project-related traffic impacts. TDM will be facilitated by the nature of the Project, which does not generate significant peak hour trips, and its proximity to numerous public transit alternatives and bicycle facilities.


On-site management will keep a supply of transit information (schedules, maps, and fare information) to be made available to the residents of the development. The Proponent will work with the Town to develop a TDM program appropriate to the Project and consistent with its level of impact.

The Proponent is prepared to take advantage of good transit and bicycle access in marketing the site to future residents by working with them to implement the following TDM measures to encourage the use of non-vehicular modes of travel.

The TDM measures for the Project may include, but are not limited to, the following:

- **Orientation Packets:** The Proponent will provide orientation packets to new residents and tenants containing information on site access and circulation; and available transportation choices, including transit routes/schedules and nearby vehicle sharing locations and bicycle facilities. On-site management will work with residents and tenants as they move in to help facilitate transportation for new arrivals.
- **Bicycle Accommodation:** The Proponent will provide interior and exterior bicycle storage in secure, sheltered areas for residents, as well as repair and maintenance stations. Subject to necessary approvals, public-use bicycle racks for visitors will be placed near building entrances and must adhere to the Town of Arlington's regulations.
- **Electric Vehicle Charging:** The Proponent will explore the feasibility of providing electric vehicle charging stations within the garages.
- **Shared-Car Services:** The Proponent will explore the feasibility of providing a shared car service (e.g., Zip Car) on-site to help reduce the need for residents to own a vehicle.
- **Transportation Coordinator:** The Proponent will designate a transportation coordinator to oversee transportation issues including parking, service and loading, and deliveries and will work with residents as they move in to raise awareness of public transportation, bicycling, and walking opportunities.
- **Project Web Site:** The web site will include transportation-related information for residents, workers, and visitors.
- **Transportation Monitoring Program:** The Proponent will implement a transportation monitoring program that will periodically monitor the TDM program through a Town of Arlington survey. The building TDM program shall be revised as necessary to update the elements as new trip reduction measures become available and/or certain programs become obsolete or ineffective.





Based upon multiple meetings with the neighborhood group, the Proponent is also proposing extensive improvements to the south of the Ryder Street exit of the Property, including:

- Repaving the existing paved surface from the Ryder Street exit of the Property to Forest Street;
- Reconstructing the existing sidewalk from the Ryder Street exit of the Property to Forest Street to create an accessible connection, including new crosswalks and wheelchair ramps at the 9 Ryder Street driveway curb cut; and inserting new a crosswalk and wheelchair ramps at the Ryder Street/Forest Street intersection; and
- Constructing a speed table on Ryder Street at the intersection with the Ryder Street exit driveway.

## 11 Conclusions

Nitsch Engineering has prepared this Traffic Impact Report (TIR) for the Project in Arlington Massachusetts. We studied seven (7) unsignalized intersections to establish the impact the removal of the existing Mirak Mill office building and the construction of a 130-unit apartment complex would have on intersection traffic operations.

We researched the crash data within the study area for the three (3) most recent years available from the MassDOT records, 2016 to 2018. The crash rates at all study intersections are all well below the District 4 and Statewide averages.

The traffic signal warrant analysis indicates that a traffic signal may be justified under current traffic conditions at the unsignalized intersection of Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway, based on the Eight-Hour Vehicular Volume, Four-Hour Vehicular Volume, and Peak Hour warrants. However, as this is an existing condition upon which the project will have minimal effect, it does not require that the Proponent install a new traffic signal.

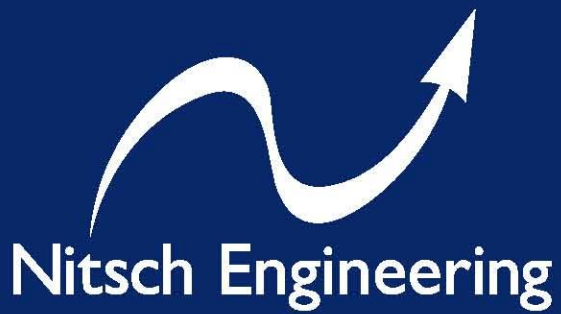
For future conditions, we projected some of the existing traffic volumes within the study area over a 5-year period to the horizon year 2025 using an annual growth rate of 2.0%, based on expected regional growth.

We estimated the net quantity of vehicle trips the proposed apartment complex would generate based on Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition* criteria. We applied an appropriate travel mode share based on the census tract data and we distributed the additional vehicle trips to the roadway network using existing travel patterns and site access modifications.

We performed a vehicle capacity analysis to compare the weekday morning and evening peak hours of the 2020 Existing conditions, 2025 No-Build conditions, and 2025 Build conditions for each of the seven (7) study intersections. Under existing conditions, our analysis indicates operational deficiencies at the following two (2) intersections:

- Massachusetts Avenue at Appleton Street/Appleton Place/Commercial Driveway; and
- Massachusetts Avenue and Forest Street/Burton Street/Mirak Innovation Park West Driveway.

Traffic operations are calculated to degrade from the 2020 Existing to 2025 No-Build conditions at some of the stop-controlled approaches to these intersections. However, the change in traffic operations from 2025 No-Build to 2025 Build conditions are so minor that they are considered negligible by current engineering standards. Therefore, as our analysis indicates that there is not a significant degradation in delay because of the Project, we do not recommend any additional changes to the roadway network.



# Traffic Impact Report *Appendix*

1165R Mass Ave Apartments  
1165R Massachusetts Avenue  
Arlington, MA

April 30, 2021

Prepared for:

1165R Mass MA Property LLC  
c/o Spaulding & Slye Investments  
One Post Office Square, 28<sup>th</sup> Floor  
Boston, MA 02109

Submitted by:

Nitsch Engineering  
2 Center Plaza, Suite 430  
Boston, MA 02108

Nitsch Engineering Project #13990.







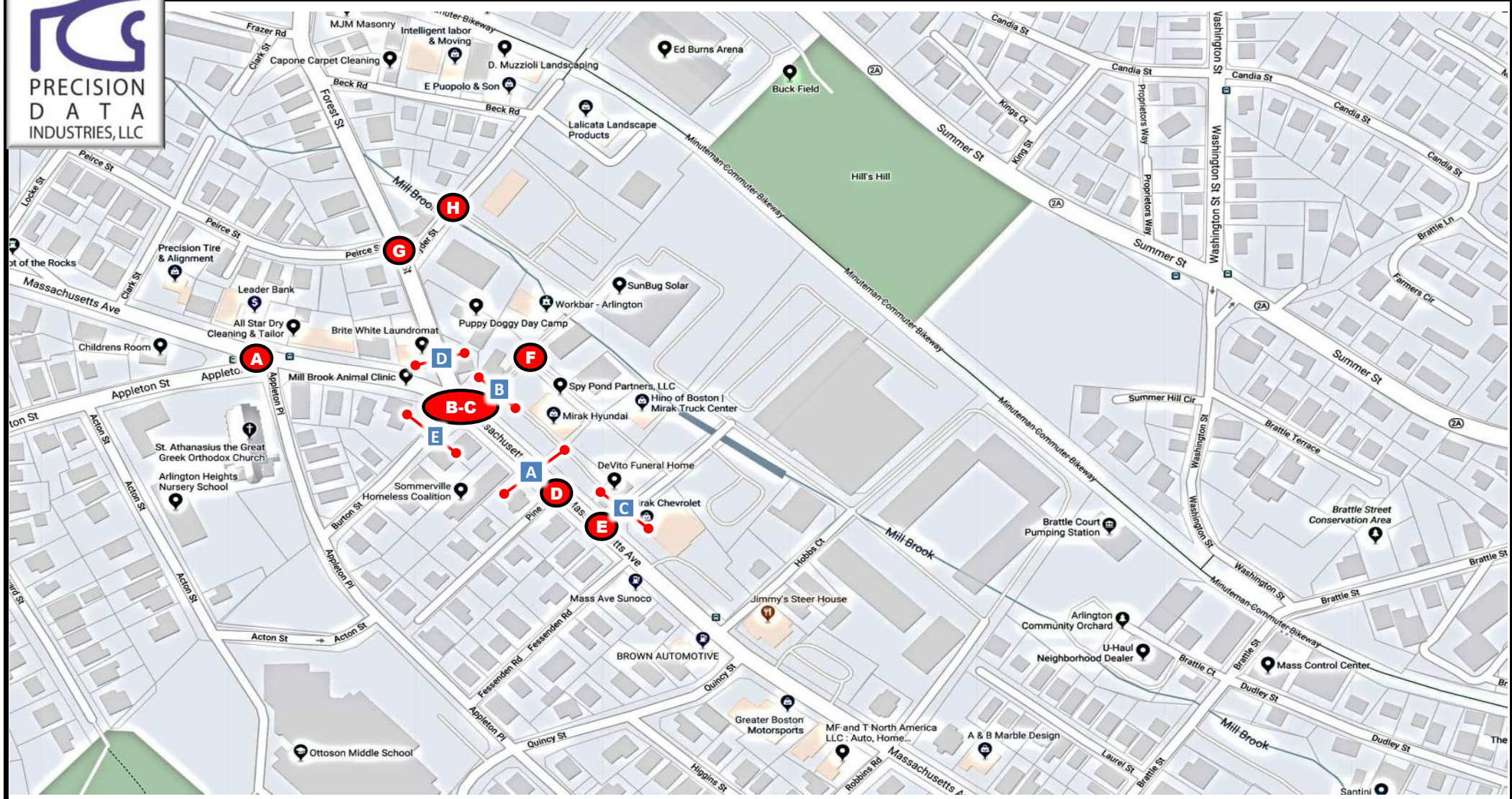
Appendix A: Traffic Count Data





Location Map: 207450 Arlington, MA

Precision Data Industries, LLC 46 Morton Street, Framingham, MA 01702 ph: 508-875-0100 email: datarequests@pdillc.com



Client: Nitsch Engineering	Engineer: B. Zimolka	Site Code: TBD	Date: Tues 2/4-Wed 2/5/20	PDI Job # 207450	City, State: Arlington, MA
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Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 ATR A

Count Date: Tuesday, February 4, 2020  
Direction: EB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	5	2	0	7
12:15 AM	6	1	0	7
12:30 AM	0	2	2	4
12:45 AM	4	2	0	6
1:00 AM	1	1	0	2
1:15 AM	4	0	0	4
1:30 AM	0	0	0	0
1:45 AM	1	1	0	2
2:00 AM	1	0	0	1
2:15 AM	2	0	0	2
2:30 AM	0	0	0	0
2:45 AM	1	1	0	2
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	2	0	0	2
3:45 AM	3	1	1	5
4:00 AM	1	0	0	1
4:15 AM	3	0	1	4
4:30 AM	9	1	0	10
4:45 AM	4	1	0	5
5:00 AM	17	1	0	18
5:15 AM	16	3	0	19
5:30 AM	15	1	0	16
5:45 AM	17	5	0	22
6:00 AM	30	2	0	32
6:15 AM	55	3	2	60
6:30 AM	82	4	2	88
6:45 AM	102	6	0	108
7:00 AM	101	11	2	114
7:15 AM	110	4	2	116
7:30 AM	110	11	1	122
7:45 AM	131	10	1	142
8:00 AM	102	7	0	109
8:15 AM	99	9	1	109
8:30 AM	116	6	0	122
8:45 AM	113	7	0	120
9:00 AM	90	8	0	98
9:15 AM	116	5	0	121
9:30 AM	87	6	1	94
9:45 AM	106	5	0	111
10:00 AM	89	8	0	97
10:15 AM	73	5	1	79
10:30 AM	108	14	1	123
10:45 AM	90	8	0	98
11:00 AM	84	4	0	88
11:15 AM	97	9	0	106
11:30 AM	85	7	0	92
11:45 AM	89	6	1	96

AM Total	2377	188	19	2584
Percentage	91.99%	7.28%	0.74%	
AM Peak	7:15 AM	7:30 AM	6:15 AM	7:00 AM
Volume	453	37	6	494

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	119	6	0	125
12:15 PM	111	6	0	117
12:30 PM	135	6	0	141
12:45 PM	45	6	0	51
1:00 PM	1	1	0	2
1:15 PM	2	0	0	2
1:30 PM	1	4	0	5
1:45 PM	0	2	0	2
2:00 PM	0	2	0	2
2:15 PM	0	3	0	3
2:30 PM	15	5	0	20
2:45 PM	105	4	0	109
3:00 PM	114	2	1	117
3:15 PM	133	2	0	135
3:30 PM	123	6	0	129
3:45 PM	125	2	1	128
4:00 PM	124	4	0	128
4:15 PM	118	3	0	121
4:30 PM	128	1	1	130
4:45 PM	144	3	0	147
5:00 PM	124	3	0	127
5:15 PM	148	3	0	151
5:30 PM	160	2	0	162
5:45 PM	143	2	0	145
6:00 PM	131	3	0	134
6:15 PM	133	2	0	135
6:30 PM	138	1	0	139
6:45 PM	115	4	0	119
7:00 PM	100	4	0	104
7:15 PM	84	1	0	85
7:30 PM	75	3	0	78
7:45 PM	61	1	0	62
8:00 PM	66	4	0	70
8:15 PM	52	1	0	53
8:30 PM	59	2	0	61
8:45 PM	44	4	0	48
9:00 PM	44	3	0	47
9:15 PM	40	4	0	44
9:30 PM	30	3	0	33
9:45 PM	24	0	0	24
10:00 PM	23	4	0	27
10:15 PM	26	2	0	28
10:30 PM	20	1	0	21
10:45 PM	14	2	0	16
11:00 PM	9	2	0	11
11:15 PM	14	1	0	15
11:30 PM	6	3	0	9
11:45 PM	6	2	0	8

PM Total	3432	135	3	3570
Percentage	96.13%	3.78%	0.08%	
PM Peak	5:15 PM	12:00 PM	3:00 PM	5:15 PM
Volume	582	24	2	592

Day Total	5809	323	22	6154
Percentage	94.39%	5.25%	79 of 409	0.36%

Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 ATR A

Count Date: Wednesday, February 5, 2020  
Direction: EB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	2	0	2
12:15 AM	7	1	0	8
12:30 AM	2	2	0	4
12:45 AM	3	2	0	5
1:00 AM	2	1	0	3
1:15 AM	2	0	0	2
1:30 AM	0	0	0	0
1:45 AM	1	0	0	1
2:00 AM	1	0	0	1
2:15 AM	1	0	0	1
2:30 AM	1	0	0	1
2:45 AM	1	0	0	1
3:00 AM	1	0	0	1
3:15 AM	0	0	0	0
3:30 AM	2	2	0	4
3:45 AM	1	0	1	2
4:00 AM	2	0	0	2
4:15 AM	7	0	0	7
4:30 AM	13	1	0	14
4:45 AM	2	1	0	3
5:00 AM	9	3	0	12
5:15 AM	16	2	1	19
5:30 AM	14	1	0	15
5:45 AM	16	3	0	19
6:00 AM	19	3	0	22
6:15 AM	55	2	0	57
6:30 AM	73	6	0	79
6:45 AM	96	18	0	114
7:00 AM	111	9	1	121
7:15 AM	114	5	0	119
7:30 AM	113	4	0	117
7:45 AM	113	4	1	118
8:00 AM	98	5	1	104
8:15 AM	130	4	0	134
8:30 AM	128	4	1	133
8:45 AM	104	6	1	111
9:00 AM	109	2	0	111
9:15 AM	116	8	1	125
9:30 AM	102	6	0	108
9:45 AM	101	8	0	109
10:00 AM	99	5	2	106
10:15 AM	71	7	0	78
10:30 AM	102	5	0	107
10:45 AM	99	4	0	103
11:00 AM	77	5	0	82
11:15 AM	106	3	0	109
11:30 AM	121	4	0	125
11:45 AM	103	5	0	108

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	107	5	0	112
12:15 PM	123	5	1	129
12:30 PM	128	5	0	133
12:45 PM	116	5	0	121
1:00 PM	102	7	0	109
1:15 PM	103	6	1	110
1:30 PM	100	9	0	109
1:45 PM	106	4	0	110
2:00 PM	90	6	0	96
2:15 PM	103	7	0	110
2:30 PM	95	5	0	100
2:45 PM	103	7	0	110
3:00 PM	128	7	0	135
3:15 PM	134	8	0	142
3:30 PM	106	7	0	113
3:45 PM	118	5	0	123
4:00 PM	119	9	2	130
4:15 PM	129	6	0	135
4:30 PM	129	6	0	135
4:45 PM	124	2	0	126
5:00 PM	150	3	0	153
5:15 PM	123	2	0	125
5:30 PM	155	2	0	157
5:45 PM	148	2	0	150
6:00 PM	146	4	0	150
6:15 PM	126	5	0	131
6:30 PM	111	3	0	114
6:45 PM	113	7	0	120
7:00 PM	93	3	0	96
7:15 PM	99	1	0	100
7:30 PM	71	5	0	76
7:45 PM	56	2	0	58
8:00 PM	73	4	0	77
8:15 PM	60	3	0	63
8:30 PM	65	1	0	66
8:45 PM	53	4	0	57
9:00 PM	48	2	0	50
9:15 PM	33	2	0	35
9:30 PM	22	4	0	26
9:45 PM	24	1	0	25
10:00 PM	18	4	0	22
10:15 PM	24	1	0	25
10:30 PM	13	0	0	13
10:45 PM	17	4	0	21
11:00 PM	10	2	0	12
11:15 PM	5	1	0	6
11:30 PM	8	3	0	11
11:45 PM	3	1	1	5

AM Total 2464 153 10 2627  
Percentage 93.80% 5.82% 0.38%  
AM Peak 8:15 AM 6:30 AM 7:45 AM 7:45 AM  
Volume 471 38 3 489

PM Total 4130 197 5 4332  
Percentage 95.34% 4.55% 0.12%  
PM Peak 5:00 PM 2:45 PM 3:15 PM 5:30 PM  
Volume 576 29 2 588

Day Total 6594 350 15 6959  
Percentage 94.75% 5.03% 80 of 4090.22%

Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 ATR A

Count Date: Tuesday, February 4, 2020  
Direction: WB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	6	2	0	8
12:15 AM	7	1	0	8
12:30 AM	3	1	0	4
12:45 AM	2	2	0	4
1:00 AM	2	1	0	3
1:15 AM	0	0	1	1
1:30 AM	0	2	0	2
1:45 AM	0	0	0	0
2:00 AM	2	0	0	2
2:15 AM	0	0	0	0
2:30 AM	1	0	0	1
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	1	0	0	1
3:30 AM	1	0	1	2
3:45 AM	1	0	0	1
4:00 AM	1	0	0	1
4:15 AM	3	0	0	3
4:30 AM	7	1	0	8
4:45 AM	9	0	0	9
5:00 AM	10	4	0	14
5:15 AM	17	3	0	20
5:30 AM	22	1	1	24
5:45 AM	28	3	0	31
6:00 AM	29	1	0	30
6:15 AM	32	5	3	40
6:30 AM	38	1	0	39
6:45 AM	69	6	0	75
7:00 AM	85	11	0	96
7:15 AM	74	7	0	81
7:30 AM	130	7	0	137
7:45 AM	139	5	1	145
8:00 AM	145	7	0	152
8:15 AM	100	3	1	104
8:30 AM	97	9	0	106
8:45 AM	124	7	1	132
9:00 AM	95	8	0	103
9:15 AM	78	8	1	87
9:30 AM	91	3	0	94
9:45 AM	98	10	1	109
10:00 AM	88	3	1	92
10:15 AM	90	7	0	97
10:30 AM	75	4	0	79
10:45 AM	90	11	0	101
11:00 AM	93	10	1	104
11:15 AM	82	4	1	87
11:30 AM	107	3	0	110
11:45 AM	106	5	2	113

AM Total	2278	166	16	2460
Percentage	92.60%	6.75%	0.65%	
AM Peak	7:30 AM	8:30 AM	5:30 AM	7:30 AM
Volume	514	32	4	538

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	112	6	1	119
12:15 PM	106	5	0	111
12:30 PM	103	7	0	110
12:45 PM	93	6	0	99
1:00 PM	4	2	1	7
1:15 PM	11	6	0	17
1:30 PM	8	2	1	11
1:45 PM	8	3	0	11
2:00 PM	6	3	1	10
2:15 PM	5	5	0	10
2:30 PM	20	1	0	21
2:45 PM	108	8	1	117
3:00 PM	116	4	0	120
3:15 PM	124	6	0	130
3:30 PM	97	3	0	100
3:45 PM	116	5	0	121
4:00 PM	117	3	0	120
4:15 PM	96	2	0	98
4:30 PM	109	3	0	112
4:45 PM	112	2	0	114
5:00 PM	113	7	1	121
5:15 PM	98	1	0	99
5:30 PM	98	1	0	99
5:45 PM	122	3	0	125
6:00 PM	123	1	0	124
6:15 PM	84	3	0	87
6:30 PM	103	3	1	107
6:45 PM	84	4	0	88
7:00 PM	97	0	0	97
7:15 PM	77	2	0	79
7:30 PM	88	3	1	92
7:45 PM	75	0	0	75
8:00 PM	72	4	0	76
8:15 PM	56	1	0	57
8:30 PM	71	5	0	76
8:45 PM	43	2	0	45
9:00 PM	65	2	0	67
9:15 PM	42	3	0	45
9:30 PM	38	2	0	40
9:45 PM	27	2	0	29
10:00 PM	24	4	0	28
10:15 PM	20	1	0	21
10:30 PM	23	1	0	24
10:45 PM	16	1	0	17
11:00 PM	14	1	0	15
11:15 PM	7	2	0	9
11:30 PM	5	1	0	6
11:45 PM	7	2	0	9

PM Total	3163	144	8	3315
Percentage	95.41%	4.34%	0.24%	
PM Peak	3:15 PM	12:00 PM	12:45 PM	3:00 PM
Volume	454	24	2	471

Day Total	5441	310	24	5775
Percentage	94.22%	5.37%	81 of 409	0.42%



Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 ATR A

Count Date: Wednesday, February 5, 2020  
Direction: WB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	4	2	0	6
12:15 AM	2	1	0	3
12:30 AM	2	2	1	5
12:45 AM	1	1	0	2
1:00 AM	4	1	0	5
1:15 AM	2	0	0	2
1:30 AM	1	0	0	1
1:45 AM	2	1	0	3
2:00 AM	0	0	0	0
2:15 AM	1	0	0	1
2:30 AM	1	0	0	1
2:45 AM	0	0	0	0
3:00 AM	1	0	0	1
3:15 AM	2	0	0	2
3:30 AM	1	0	0	1
3:45 AM	0	0	0	0
4:00 AM	2	0	0	2
4:15 AM	1	0	0	1
4:30 AM	6	1	0	7
4:45 AM	7	1	1	9
5:00 AM	10	3	0	13
5:15 AM	12	1	0	13
5:30 AM	23	1	0	24
5:45 AM	20	2	0	22
6:00 AM	23	4	1	28
6:15 AM	34	5	1	40
6:30 AM	35	3	0	38
6:45 AM	67	11	1	79
7:00 AM	78	3	0	81
7:15 AM	90	7	1	98
7:30 AM	129	5	0	134
7:45 AM	148	5	0	153
8:00 AM	143	1	1	145
8:15 AM	110	5	1	116
8:30 AM	122	4	1	127
8:45 AM	106	5	0	111
9:00 AM	104	12	0	116
9:15 AM	80	12	1	93
9:30 AM	90	7	2	99
9:45 AM	97	8	1	106
10:00 AM	97	2	0	99
10:15 AM	82	7	0	89
10:30 AM	87	3	0	90
10:45 AM	89	4	0	93
11:00 AM	84	8	1	93
11:15 AM	91	5	0	96
11:30 AM	99	4	0	103
11:45 AM	105	5	0	110

AM Total	2295	152	14	2461
Percentage	93.25%	6.18%	0.57%	
AM Peak	7:30 AM	9:00 AM	9:00 AM	7:30 AM
Volume	530	39	4	548

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	99	8	0	107
12:15 PM	125	5	1	131
12:30 PM	100	4	1	105
12:45 PM	109	9	0	118
1:00 PM	105	4	0	109
1:15 PM	106	5	0	111
1:30 PM	113	10	0	123
1:45 PM	95	5	0	100
2:00 PM	113	5	0	118
2:15 PM	103	10	0	113
2:30 PM	141	2	0	143
2:45 PM	130	7	0	137
3:00 PM	129	12	0	141
3:15 PM	113	6	2	121
3:30 PM	126	6	0	132
3:45 PM	106	8	0	114
4:00 PM	119	1	0	120
4:15 PM	123	5	0	128
4:30 PM	98	5	1	104
4:45 PM	113	1	0	114
5:00 PM	126	5	0	131
5:15 PM	126	2	0	128
5:30 PM	113	4	0	117
5:45 PM	111	3	0	114
6:00 PM	114	2	0	116
6:15 PM	87	6	0	93
6:30 PM	92	7	0	99
6:45 PM	92	4	0	96
7:00 PM	82	2	0	84
7:15 PM	84	2	0	86
7:30 PM	62	5	0	67
7:45 PM	51	1	0	52
8:00 PM	70	3	0	73
8:15 PM	69	3	0	72
8:30 PM	72	2	1	75
8:45 PM	55	2	0	57
9:00 PM	59	2	0	61
9:15 PM	44	4	0	48
9:30 PM	28	1	0	29
9:45 PM	26	3	0	29
10:00 PM	23	2	0	25
10:15 PM	22	1	0	23
10:30 PM	12	1	0	13
10:45 PM	26	2	0	28
11:00 PM	11	1	0	12
11:15 PM	7	2	0	9
11:30 PM	3	2	0	5
11:45 PM	7	2	0	9

PM Total	3940	194	6	4140
Percentage	95.17%	4.69%	0.14%	
PM Peak	2:30 PM	3:00 PM	12:00 PM	2:30 PM
Volume	513	32	2	542

Day Total	6235	346	20	6601
Percentage	94.46%	5.24%	82 of 409	0.30%

Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 ATR A

Direction: EB

### Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	7	125	2	112	0	0	0	0	0	0	0	0	0	0	5	119
12:15	7	117	8	129	0	0	0	0	0	0	0	0	0	0	8	123
12:30	4	141	4	133	0	0	0	0	0	0	0	0	0	0	4	137
12:45	6	51	5	121	0	0	0	0	0	0	0	0	0	0	6	86
1:00	2	2	3	109	0	0	0	0	0	0	0	0	0	0	3	56
1:15	4	2	2	110	0	0	0	0	0	0	0	0	0	0	3	56
1:30	0	5	0	109	0	0	0	0	0	0	0	0	0	0	0	57
1:45	2	2	1	110	0	0	0	0	0	0	0	0	0	0	2	56
2:00	1	2	1	96	0	0	0	0	0	0	0	0	0	0	1	49
2:15	2	3	1	110	0	0	0	0	0	0	0	0	0	0	2	57
2:30	0	20	1	100	0	0	0	0	0	0	0	0	0	0	1	60
2:45	2	109	1	110	0	0	0	0	0	0	0	0	0	0	2	110
3:00	0	117	1	135	0	0	0	0	0	0	0	0	0	0	1	126
3:15	0	135	0	142	0	0	0	0	0	0	0	0	0	0	0	139
3:30	2	129	4	113	0	0	0	0	0	0	0	0	0	0	3	121
3:45	5	128	2	123	0	0	0	0	0	0	0	0	0	0	4	126
4:00	1	128	2	130	0	0	0	0	0	0	0	0	0	0	2	129
4:15	4	121	7	135	0	0	0	0	0	0	0	0	0	0	6	128
4:30	10	130	14	135	0	0	0	0	0	0	0	0	0	0	12	133
4:45	5	147	3	126	0	0	0	0	0	0	0	0	0	0	4	137
5:00	18	127	12	153	0	0	0	0	0	0	0	0	0	0	15	140
5:15	19	151	19	125	0	0	0	0	0	0	0	0	0	0	19	138
5:30	16	162	15	157	0	0	0	0	0	0	0	0	0	0	16	160
5:45	22	145	19	150	0	0	0	0	0	0	0	0	0	0	21	148
6:00	32	134	22	150	0	0	0	0	0	0	0	0	0	0	27	142
6:15	60	135	57	131	0	0	0	0	0	0	0	0	0	0	59	133
6:30	88	139	79	114	0	0	0	0	0	0	0	0	0	0	84	127
6:45	108	119	114	120	0	0	0	0	0	0	0	0	0	0	111	120
7:00	114	104	121	96	0	0	0	0	0	0	0	0	0	0	118	100
7:15	116	85	119	100	0	0	0	0	0	0	0	0	0	0	118	93
7:30	122	78	117	76	0	0	0	0	0	0	0	0	0	0	120	77
7:45	142	62	118	58	0	0	0	0	0	0	0	0	0	0	130	60
8:00	109	70	104	77	0	0	0	0	0	0	0	0	0	0	107	74
8:15	109	53	134	63	0	0	0	0	0	0	0	0	0	0	122	58
8:30	122	61	133	66	0	0	0	0	0	0	0	0	0	0	128	64
8:45	120	48	111	57	0	0	0	0	0	0	0	0	0	0	116	53
9:00	98	47	111	50	0	0	0	0	0	0	0	0	0	0	105	49
9:15	121	44	125	35	0	0	0	0	0	0	0	0	0	0	123	40
9:30	94	33	108	26	0	0	0	0	0	0	0	0	0	0	101	30
9:45	111	24	109	25	0	0	0	0	0	0	0	0	0	0	110	25
10:00	97	27	106	22	0	0	0	0	0	0	0	0	0	0	102	25
10:15	79	28	78	25	0	0	0	0	0	0	0	0	0	0	79	27
10:30	123	21	107	13	0	0	0	0	0	0	0	0	0	0	115	17
10:45	98	16	103	21	0	0	0	0	0	0	0	0	0	0	101	19
11:00	88	11	82	12	0	0	0	0	0	0	0	0	0	0	85	12
11:15	106	15	109	6	0	0	0	0	0	0	0	0	0	0	108	11
11:30	92	9	125	11	0	0	0	0	0	0	0	0	0	0	109	10
11:45	96	8	108	5	0	0	0	0	0	0	0	0	0	0	102	7
Total	2584	3570	2627	4332	0	0	0	0	0	0	0	0	0	0	2606	3951
Day Total	6154		6959		0		0		0		0		0		6557	
Peak HR	7:00 AM	5:15 PM	7:45 AM	5:30 PM												
Volume	494	592	489	588											486	587

Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 ATR A

Direction: WB

## Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	8	119	6	107	0	0	0	0	0	0	0	0	0	0	7	113
12:15	8	111	3	131	0	0	0	0	0	0	0	0	0	0	6	121
12:30	4	110	5	105	0	0	0	0	0	0	0	0	0	0	5	108
12:45	4	99	2	118	0	0	0	0	0	0	0	0	0	0	3	109
1:00	3	7	5	109	0	0	0	0	0	0	0	0	0	0	4	58
1:15	1	17	2	111	0	0	0	0	0	0	0	0	0	0	2	64
1:30	2	11	1	123	0	0	0	0	0	0	0	0	0	0	2	67
1:45	0	11	3	100	0	0	0	0	0	0	0	0	0	0	2	56
2:00	2	10	0	118	0	0	0	0	0	0	0	0	0	0	1	64
2:15	0	10	1	113	0	0	0	0	0	0	0	0	0	0	1	62
2:30	1	21	1	143	0	0	0	0	0	0	0	0	0	0	1	82
2:45	0	117	0	137	0	0	0	0	0	0	0	0	0	0	0	127
3:00	0	120	1	141	0	0	0	0	0	0	0	0	0	0	1	131
3:15	1	130	2	121	0	0	0	0	0	0	0	0	0	0	2	126
3:30	2	100	1	132	0	0	0	0	0	0	0	0	0	0	2	116
3:45	1	121	0	114	0	0	0	0	0	0	0	0	0	0	1	118
4:00	1	120	2	120	0	0	0	0	0	0	0	0	0	0	2	120
4:15	3	98	1	128	0	0	0	0	0	0	0	0	0	0	2	113
4:30	8	112	7	104	0	0	0	0	0	0	0	0	0	0	8	108
4:45	9	114	9	114	0	0	0	0	0	0	0	0	0	0	9	114
5:00	14	121	13	131	0	0	0	0	0	0	0	0	0	0	14	126
5:15	20	99	13	128	0	0	0	0	0	0	0	0	0	0	17	114
5:30	24	99	24	117	0	0	0	0	0	0	0	0	0	0	24	108
5:45	31	125	22	114	0	0	0	0	0	0	0	0	0	0	27	120
6:00	30	124	28	116	0	0	0	0	0	0	0	0	0	0	29	120
6:15	40	87	40	93	0	0	0	0	0	0	0	0	0	0	40	90
6:30	39	107	38	99	0	0	0	0	0	0	0	0	0	0	39	103
6:45	75	88	79	96	0	0	0	0	0	0	0	0	0	0	77	92
7:00	96	97	81	84	0	0	0	0	0	0	0	0	0	0	89	91
7:15	81	79	98	86	0	0	0	0	0	0	0	0	0	0	90	83
7:30	137	92	134	67	0	0	0	0	0	0	0	0	0	0	136	80
7:45	145	75	153	52	0	0	0	0	0	0	0	0	0	0	149	64
8:00	152	76	145	73	0	0	0	0	0	0	0	0	0	0	149	75
8:15	104	57	116	72	0	0	0	0	0	0	0	0	0	0	110	65
8:30	106	76	127	75	0	0	0	0	0	0	0	0	0	0	117	76
8:45	132	45	111	57	0	0	0	0	0	0	0	0	0	0	122	51
9:00	103	67	116	61	0	0	0	0	0	0	0	0	0	0	110	64
9:15	87	45	93	48	0	0	0	0	0	0	0	0	0	0	90	47
9:30	94	40	99	29	0	0	0	0	0	0	0	0	0	0	97	35
9:45	109	29	106	29	0	0	0	0	0	0	0	0	0	0	108	29
10:00	92	28	99	25	0	0	0	0	0	0	0	0	0	0	96	27
10:15	97	21	89	23	0	0	0	0	0	0	0	0	0	0	93	22
10:30	79	24	90	13	0	0	0	0	0	0	0	0	0	0	85	19
10:45	101	17	93	28	0	0	0	0	0	0	0	0	0	0	97	23
11:00	104	15	93	12	0	0	0	0	0	0	0	0	0	0	99	14
11:15	87	9	96	9	0	0	0	0	0	0	0	0	0	0	92	9
11:30	110	6	103	5	0	0	0	0	0	0	0	0	0	0	107	6
11:45	113	9	110	9	0	0	0	0	0	0	0	0	0	0	112	9
Total	2460	3315	2461	4140	0	0	0	0	0	0	0	0	0	0	2461	3728
Day Total	5775		6601		0		0		0		0		0		6188	
Peak HR	7:30 AM	3:00 PM	7:30 AM	2:30 PM												
Volume	538	471	548	542											543	499



Mirak Mill West Driveway  
North of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 B

Count Date: Tuesday, February 4, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	1	0	0	1
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	1	0	0	1
5:30 AM	0	0	0	0
5:45 AM	3	0	0	3
6:00 AM	6	0	0	6
6:15 AM	0	0	0	0
6:30 AM	1	0	0	1
6:45 AM	1	0	0	1
7:00 AM	2	0	0	2
7:15 AM	4	0	0	4
7:30 AM	5	0	0	5
7:45 AM	5	0	0	5
8:00 AM	6	0	0	6
8:15 AM	11	0	0	11
8:30 AM	5	0	0	5
8:45 AM	6	0	0	6
9:00 AM	12	0	0	12
9:15 AM	8	1	0	9
9:30 AM	5	1	0	6
9:45 AM	10	1	0	11
10:00 AM	5	0	0	5
10:15 AM	2	0	0	2
10:30 AM	7	0	0	7
10:45 AM	6	0	0	6
11:00 AM	5	0	0	5
11:15 AM	4	0	0	4
11:30 AM	4	0	0	4
11:45 AM	7	0	0	7

AM Total	132	3	0	135
Percentage	97.78%	2.22%	0.00%	
AM Peak	9:00 AM	9:00 AM	12:00 AM	9:00 AM
Volume	35	3	0	38

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	3	0	0	3
12:15 PM	5	0	0	5
12:30 PM	3	1	0	4
12:45 PM	4	0	0	4
1:00 PM	6	1	1	8
1:15 PM	6	0	0	6
1:30 PM	6	0	0	6
1:45 PM	11	0	0	11
2:00 PM	3	0	0	3
2:15 PM	7	1	0	8
2:30 PM	4	1	0	5
2:45 PM	2	0	0	2
3:00 PM	3	0	0	3
3:15 PM	2	0	0	2
3:30 PM	1	0	0	1
3:45 PM	2	0	0	2
4:00 PM	2	0	0	2
4:15 PM	1	0	0	1
4:30 PM	3	0	0	3
4:45 PM	2	0	0	2
5:00 PM	4	0	0	4
5:15 PM	2	0	0	2
5:30 PM	1	0	0	1
5:45 PM	1	0	0	1
6:00 PM	2	0	0	2
6:15 PM	1	0	0	1
6:30 PM	4	0	0	4
6:45 PM	2	0	0	2
7:00 PM	2	0	0	2
7:15 PM	2	0	0	2
7:30 PM	1	0	0	1
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	1	0	0	1
8:45 PM	0	0	0	0
9:00 PM	3	0	0	3
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	1	0	0	1
10:15 PM	0	0	0	0
10:30 PM	2	0	0	2
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	105	4	1	110
Percentage	95.45%	3.64%	0.91%	
PM Peak	1:00 PM	12:15 PM	12:15 PM	1:00 PM
Volume	29	2	1	31

Day Total	237	7	1	245
Percentage	96.73%	2.86%	85 of 409	0.41%

Mirak Mill West Driveway  
North of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 B

Count Date: Wednesday, February 5, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	1	0	0	1
5:45 AM	5	0	0	5
6:00 AM	6	0	0	6
6:15 AM	0	0	0	0
6:30 AM	1	0	0	1
6:45 AM	3	0	0	3
7:00 AM	4	0	0	4
7:15 AM	4	0	0	4
7:30 AM	1	0	0	1
7:45 AM	4	0	0	4
8:00 AM	8	0	0	8
8:15 AM	8	0	0	8
8:30 AM	8	1	0	9
8:45 AM	16	0	0	16
9:00 AM	15	0	0	15
9:15 AM	6	0	0	6
9:30 AM	8	0	0	8
9:45 AM	2	0	0	2
10:00 AM	3	2	0	5
10:15 AM	1	0	0	1
10:30 AM	2	0	0	2
10:45 AM	2	1	0	3
11:00 AM	5	0	0	5
11:15 AM	2	0	0	2
11:30 AM	7	0	0	7
11:45 AM	1	0	0	1

AM Total	123	4	0	127
Percentage	96.85%	3.15%	0.00%	
AM Peak	8:15 AM	10:00 AM	12:00 AM	8:15 AM
Volume	47	3	0	48

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	3	0	0	3
12:15 PM	7	0	0	7
12:30 PM	7	1	0	8
12:45 PM	3	0	0	3
1:00 PM	9	0	0	9
1:15 PM	6	0	0	6
1:30 PM	5	0	0	5
1:45 PM	10	0	0	10
2:00 PM	3	0	0	3
2:15 PM	3	0	0	3
2:30 PM	2	0	0	2
2:45 PM	2	0	0	2
3:00 PM	6	0	0	6
3:15 PM	2	0	0	2
3:30 PM	7	0	0	7
3:45 PM	4	0	0	4
4:00 PM	5	0	0	5
4:15 PM	3	0	0	3
4:30 PM	2	0	0	2
4:45 PM	2	0	0	2
5:00 PM	0	0	0	0
5:15 PM	4	0	0	4
5:30 PM	3	0	0	3
5:45 PM	2	0	0	2
6:00 PM	1	0	0	1
6:15 PM	2	0	0	2
6:30 PM	1	0	0	1
6:45 PM	0	0	0	0
7:00 PM	2	0	0	2
7:15 PM	1	0	0	1
7:30 PM	2	0	0	2
7:45 PM	3	0	0	3
8:00 PM	1	0	0	1
8:15 PM	1	0	0	1
8:30 PM	1	0	0	1
8:45 PM	2	0	0	2
9:00 PM	0	0	0	0
9:15 PM	2	0	0	2
9:30 PM	0	0	0	0
9:45 PM	1	0	0	1
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	1	0	0	1
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	121	1	0	122
Percentage	99.18%	0.82%	0.00%	
PM Peak	1:00 PM	12:00 PM	12:00 PM	1:00 PM
Volume	30	1	0	30

Day Total	244	5	0	249
Percentage	97.99%	2.01%	86 of 409	0.00%

Mirak Mill West Driveway  
North of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 B

Count Date: Tuesday, February 4, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	1	0	0	1
5:30 AM	0	0	0	0
5:45 AM	1	0	0	1
6:00 AM	0	0	0	0
6:15 AM	2	0	0	2
6:30 AM	0	0	0	0
6:45 AM	1	0	0	1
7:00 AM	1	0	0	1
7:15 AM	1	0	0	1
7:30 AM	1	0	0	1
7:45 AM	2	0	0	2
8:00 AM	2	0	0	2
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	2	0	0	2
9:00 AM	1	0	0	1
9:15 AM	3	0	0	3
9:30 AM	2	1	0	3
9:45 AM	1	0	0	1
10:00 AM	1	0	0	1
10:15 AM	1	0	0	1
10:30 AM	2	1	0	3
10:45 AM	0	0	0	0
11:00 AM	6	0	0	6
11:15 AM	2	0	0	2
11:30 AM	3	1	0	4
11:45 AM	4	0	0	4

AM Total	40	3	0	43
Percentage	93.02%	6.98%	0.00%	
AM Peak	11:00 AM	8:45 AM	12:00 AM	11:00 AM
Volume	15	1	0	16

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	3	0	0	3
12:15 PM	5	0	0	5
12:30 PM	9	0	0	9
12:45 PM	7	0	0	7
1:00 PM	10	0	0	10
1:15 PM	2	0	0	2
1:30 PM	6	0	0	6
1:45 PM	5	0	0	5
2:00 PM	1	0	0	1
2:15 PM	8	0	0	8
2:30 PM	6	0	0	6
2:45 PM	3	0	0	3
3:00 PM	5	0	0	5
3:15 PM	5	0	0	5
3:30 PM	4	0	0	4
3:45 PM	9	0	0	9
4:00 PM	4	0	0	4
4:15 PM	3	0	0	3
4:30 PM	8	0	0	8
4:45 PM	8	0	0	8
5:00 PM	11	0	0	11
5:15 PM	2	0	0	2
5:30 PM	5	1	0	6
5:45 PM	5	0	0	5
6:00 PM	7	0	0	7
6:15 PM	3	0	0	3
6:30 PM	2	0	0	2
6:45 PM	8	0	0	8
7:00 PM	1	0	0	1
7:15 PM	3	0	0	3
7:30 PM	4	0	0	4
7:45 PM	2	0	0	2
8:00 PM	4	0	0	4
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	2	0	0	2
10:30 PM	0	0	0	0
10:45 PM	1	0	0	1
11:00 PM	0	0	0	0
11:15 PM	1	0	0	1
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	172	1	0	173
Percentage	99.42%	0.58%	0.00%	
PM Peak	12:15 PM	4:45 PM	12:00 PM	12:15 PM
Volume	31	1	0	31

Day Total	212	4	0	216
Percentage	98.15%	1.85%	87 of 409	0.00%



Mirak Mill West Driveway  
North of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 B

Count Date: Wednesday, February 5, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	2	0	0	2
6:15 AM	4	0	0	4
6:30 AM	1	0	0	1
6:45 AM	1	0	0	1
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	1	0	0	1
7:45 AM	1	0	0	1
8:00 AM	0	0	0	0
8:15 AM	3	0	0	3
8:30 AM	4	0	0	4
8:45 AM	1	0	0	1
9:00 AM	3	0	0	3
9:15 AM	2	0	0	2
9:30 AM	2	0	0	2
9:45 AM	1	0	0	1
10:00 AM	2	2	0	4
10:15 AM	1	0	0	1
10:30 AM	4	0	0	4
10:45 AM	1	0	0	1
11:00 AM	4	0	0	4
11:15 AM	4	0	0	4
11:30 AM	3	0	0	3
11:45 AM	3	0	0	3

AM Total	48	2	0	50
Percentage	96.00%	4.00%	0.00%	
AM Peak	11:00 AM	9:15 AM	12:00 AM	11:00 AM
Volume	14	2	0	14

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	5	0	0	5
12:15 PM	10	0	0	10
12:30 PM	4	1	0	5
12:45 PM	9	0	0	9
1:00 PM	6	0	0	6
1:15 PM	1	0	0	1
1:30 PM	2	0	0	2
1:45 PM	5	0	0	5
2:00 PM	4	0	0	4
2:15 PM	3	0	0	3
2:30 PM	4	0	0	4
2:45 PM	3	0	0	3
3:00 PM	7	0	0	7
3:15 PM	5	0	0	5
3:30 PM	4	0	0	4
3:45 PM	4	0	0	4
4:00 PM	7	0	0	7
4:15 PM	6	0	0	6
4:30 PM	13	0	0	13
4:45 PM	9	0	0	9
5:00 PM	3	0	0	3
5:15 PM	8	0	0	8
5:30 PM	8	0	0	8
5:45 PM	3	0	0	3
6:00 PM	10	0	0	10
6:15 PM	3	0	0	3
6:30 PM	1	0	0	1
6:45 PM	2	0	0	2
7:00 PM	1	0	0	1
7:15 PM	2	0	0	2
7:30 PM	1	0	0	1
7:45 PM	1	0	0	1
8:00 PM	2	0	0	2
8:15 PM	3	0	0	3
8:30 PM	1	0	0	1
8:45 PM	1	0	0	1
9:00 PM	1	0	0	1
9:15 PM	0	0	0	0
9:30 PM	2	0	0	2
9:45 PM	0	0	0	0
10:00 PM	1	0	0	1
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	1	0	0	1
11:15 PM	1	0	0	1
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	167	1	0	168
Percentage	99.40%	0.60%	0.00%	
PM Peak	4:00 PM	12:00 PM	12:00 PM	4:00 PM
Volume	35	1	0	35

Day Total	215	3	0	218
Percentage	98.62%	1.38%	88 of 409	0.00%

Mirak Mill West Driveway  
North of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 B

Direction: NB

### Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	3
12:15	0	5	0	7	0	0	0	0	0	0	0	0	0	0	0	6
12:30	0	4	0	8	0	0	0	0	0	0	0	0	0	0	0	6
12:45	0	4	0	3	0	0	0	0	0	0	0	0	0	0	0	4
1:00	0	8	0	9	0	0	0	0	0	0	0	0	0	0	0	9
1:15	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:30	0	6	0	5	0	0	0	0	0	0	0	0	0	0	0	6
1:45	0	11	0	10	0	0	0	0	0	0	0	0	0	0	0	11
2:00	1	3	0	3	0	0	0	0	0	0	0	0	0	0	1	3
2:15	0	8	0	3	0	0	0	0	0	0	0	0	0	0	0	6
2:30	0	5	0	2	0	0	0	0	0	0	0	0	0	0	0	4
2:45	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00	0	3	0	6	0	0	0	0	0	0	0	0	0	0	0	5
3:15	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:30	0	1	0	7	0	0	0	0	0	0	0	0	0	0	0	4
3:45	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0	3
4:00	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	4
4:15	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	2
4:30	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3
4:45	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
5:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15	1	2	0	4	0	0	0	0	0	0	0	0	0	0	1	3
5:30	0	1	1	3	0	0	0	0	0	0	0	0	0	0	1	2
5:45	3	1	5	2	0	0	0	0	0	0	0	0	0	0	4	2
6:00	6	2	6	1	0	0	0	0	0	0	0	0	0	0	6	2
6:15	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2
6:30	1	4	1	1	0	0	0	0	0	0	0	0	0	0	1	3
6:45	1	2	3	0	0	0	0	0	0	0	0	0	0	0	2	1
7:00	2	2	4	2	0	0	0	0	0	0	0	0	0	0	3	2
7:15	4	2	4	1	0	0	0	0	0	0	0	0	0	0	4	2
7:30	5	1	1	2	0	0	0	0	0	0	0	0	0	0	3	2
7:45	5	0	4	3	0	0	0	0	0	0	0	0	0	0	5	2
8:00	6	0	8	1	0	0	0	0	0	0	0	0	0	0	7	1
8:15	11	0	8	1	0	0	0	0	0	0	0	0	0	0	10	1
8:30	5	1	9	1	0	0	0	0	0	0	0	0	0	0	7	1
8:45	6	0	16	2	0	0	0	0	0	0	0	0	0	0	11	1
9:00	12	3	15	0	0	0	0	0	0	0	0	0	0	0	14	2
9:15	9	0	6	2	0	0	0	0	0	0	0	0	0	0	8	1
9:30	6	0	8	0	0	0	0	0	0	0	0	0	0	0	7	0
9:45	11	0	2	1	0	0	0	0	0	0	0	0	0	0	7	1
10:00	5	1	5	0	0	0	0	0	0	0	0	0	0	0	5	1
10:15	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
10:30	7	2	2	0	0	0	0	0	0	0	0	0	0	0	5	1
10:45	6	0	3	0	0	0	0	0	0	0	0	0	0	0	5	0
11:00	5	0	5	0	0	0	0	0	0	0	0	0	0	0	5	0
11:15	4	0	2	1	0	0	0	0	0	0	0	0	0	0	3	1
11:30	4	0	7	0	0	0	0	0	0	0	0	0	0	0	6	0
11:45	7	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0
Total	135	110	127	122	0	0	0	0	0	0	0	0	0	0	131	116
Day Total	245		249		0		0		0		0		0		247	
Peak HR	9:00 AM	1:00 PM	8:15 AM	1:00 PM												
Volume	38	31	48	30											41	31

Mirak Mill West Driveway  
North of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 B

Direction: SB

## Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	3	0	5	0	0	0	0	0	0	0	0	0	0	0	4
12:15	0	5	0	10	0	0	0	0	0	0	0	0	0	0	0	8
12:30	0	9	0	5	0	0	0	0	0	0	0	0	0	0	0	7
12:45	0	7	0	9	0	0	0	0	0	0	0	0	0	0	0	8
1:00	0	10	0	6	0	0	0	0	0	0	0	0	0	0	0	8
1:15	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2
1:30	0	6	0	2	0	0	0	0	0	0	0	0	0	0	0	4
1:45	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:00	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	3
2:15	0	8	0	3	0	0	0	0	0	0	0	0	0	0	0	6
2:30	0	6	0	4	0	0	0	0	0	0	0	0	0	0	0	5
2:45	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	5	0	7	0	0	0	0	0	0	0	0	0	0	0	6
3:15	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	5
3:30	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:45	0	9	0	4	0	0	0	0	0	0	0	0	0	0	0	7
4:00	0	4	0	7	0	0	0	0	0	0	0	0	0	0	0	6
4:15	0	3	0	6	0	0	0	0	0	0	0	0	0	0	0	5
4:30	0	8	0	13	0	0	0	0	0	0	0	0	0	0	0	11
4:45	0	8	0	9	0	0	0	0	0	0	0	0	0	0	0	9
5:00	0	11	0	3	0	0	0	0	0	0	0	0	0	0	0	7
5:15	1	2	0	8	0	0	0	0	0	0	0	0	0	0	1	5
5:30	0	6	0	8	0	0	0	0	0	0	0	0	0	0	0	7
5:45	1	5	0	3	0	0	0	0	0	0	0	0	0	0	1	4
6:00	0	7	2	10	0	0	0	0	0	0	0	0	0	0	1	9
6:15	2	3	4	3	0	0	0	0	0	0	0	0	0	0	3	3
6:30	0	2	1	1	0	0	0	0	0	0	0	0	0	0	1	2
6:45	1	8	1	2	0	0	0	0	0	0	0	0	0	0	1	5
7:00	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
7:15	1	3	0	2	0	0	0	0	0	0	0	0	0	0	1	3
7:30	1	4	1	1	0	0	0	0	0	0	0	0	0	0	1	3
7:45	2	2	1	1	0	0	0	0	0	0	0	0	0	0	2	2
8:00	2	4	0	2	0	0	0	0	0	0	0	0	0	0	1	3
8:15	0	0	3	3	0	0	0	0	0	0	0	0	0	0	2	2
8:30	0	0	4	1	0	0	0	0	0	0	0	0	0	0	2	1
8:45	2	0	1	1	0	0	0	0	0	0	0	0	0	0	2	1
9:00	1	0	3	1	0	0	0	0	0	0	0	0	0	0	2	1
9:15	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
9:30	3	0	2	2	0	0	0	0	0	0	0	0	0	0	3	1
9:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
10:00	1	0	4	1	0	0	0	0	0	0	0	0	0	0	3	1
10:15	1	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1
10:30	3	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
10:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
11:00	6	0	4	1	0	0	0	0	0	0	0	0	0	0	5	1
11:15	2	1	4	1	0	0	0	0	0	0	0	0	0	0	3	1
11:30	4	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0
11:45	4	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0
Total	43	173	50	168	0	0	0	0	0	0	0	0	0	0	47	171
Day Total	216		218		0		0		0		0		0		217	
Peak HR	11:00 AM	12:15 PM	11:00 AM	4:00 PM												
Volume	16	31	14	35											15	31



Quinn Road (East Driveway)  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 C

Count Date: Tuesday, February 4, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	1	0	0	1
5:30 AM	0	0	0	0
5:45 AM	1	0	0	1
6:00 AM	1	0	0	1
6:15 AM	6	0	0	6
6:30 AM	0	0	0	0
6:45 AM	6	0	0	6
7:00 AM	4	1	0	5
7:15 AM	8	1	0	9
7:30 AM	4	0	0	4
7:45 AM	11	0	0	11
8:00 AM	13	0	0	13
8:15 AM	6	1	0	7
8:30 AM	4	0	0	4
8:45 AM	7	0	0	7
9:00 AM	9	1	0	10
9:15 AM	10	0	0	10
9:30 AM	1	0	0	1
9:45 AM	8	2	0	10
10:00 AM	10	0	0	10
10:15 AM	4	0	0	4
10:30 AM	7	3	0	10
10:45 AM	4	2	0	6
11:00 AM	2	0	0	2
11:15 AM	8	0	0	8
11:30 AM	7	0	0	7
11:45 AM	4	0	0	4

AM Total	146	11	0	157
Percentage	92.99%	7.01%	0.00%	
AM Peak	7:15 AM	9:45 AM	12:00 AM	7:15 AM
Volume	36	5	0	37

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	9	1	0	10
12:15 PM	5	0	0	5
12:30 PM	7	0	0	7
12:45 PM	20	3	0	23
1:00 PM	1	0	1	2
1:15 PM	1	0	0	1
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	1	1
2:30 PM	0	1	0	1
2:45 PM	4	0	0	4
3:00 PM	2	0	1	3
3:15 PM	4	0	0	4
3:30 PM	4	0	0	4
3:45 PM	2	0	0	2
4:00 PM	3	0	0	3
4:15 PM	3	0	0	3
4:30 PM	3	0	0	3
4:45 PM	3	0	0	3
5:00 PM	3	0	0	3
5:15 PM	2	0	0	2
5:30 PM	3	0	0	3
5:45 PM	1	0	0	1
6:00 PM	1	0	0	1
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	1	0	0	1
7:00 PM	0	0	0	0
7:15 PM	1	0	0	1
7:30 PM	1	0	0	1
7:45 PM	1	0	0	1
8:00 PM	2	0	0	2
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	1	0	1
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	1	0	0	1
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	1	0	0	1
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	89	6	3	98
Percentage	90.82%	6.12%	3.06%	
PM Peak	12:00 PM	12:00 PM	2:15 PM	12:00 PM
Volume	41	4	2	45

Day Total	235	17	3	255
Percentage	92.16%	6.67%	91 of 409	1.18%

Quinn Road (East Driveway)  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 C

Count Date: Wednesday, February 5, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	1	0	0	1
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	1	0	0	1
6:00 AM	1	0	0	1
6:15 AM	7	0	0	7
6:30 AM	9	0	0	9
6:45 AM	7	1	0	8
7:00 AM	7	1	0	8
7:15 AM	6	0	0	6
7:30 AM	4	0	0	4
7:45 AM	3	0	0	3
8:00 AM	9	0	2	11
8:15 AM	7	1	0	8
8:30 AM	3	1	0	4
8:45 AM	12	1	0	13
9:00 AM	8	0	0	8
9:15 AM	9	0	0	9
9:30 AM	11	1	0	12
9:45 AM	6	0	0	6
10:00 AM	4	1	0	5
10:15 AM	5	1	0	6
10:30 AM	2	0	0	2
10:45 AM	0	0	0	0
11:00 AM	7	0	0	7
11:15 AM	8	0	0	8
11:30 AM	5	0	1	6
11:45 AM	7	1	0	8

AM Total	149	9	3	161
Percentage	92.55%	5.59%	1.86%	
AM Peak	8:45 AM	8:00 AM	7:15 AM	8:45 AM
Volume	40	3	2	42

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	4	0	0	4
12:15 PM	5	0	0	5
12:30 PM	7	0	0	7
12:45 PM	10	0	0	10
1:00 PM	6	1	0	7
1:15 PM	3	1	0	4
1:30 PM	8	0	0	8
1:45 PM	11	0	0	11
2:00 PM	4	0	0	4
2:15 PM	5	2	0	7
2:30 PM	5	0	1	6
2:45 PM	2	0	0	2
3:00 PM	5	0	0	5
3:15 PM	7	0	0	7
3:30 PM	4	0	0	4
3:45 PM	2	0	0	2
4:00 PM	4	0	0	4
4:15 PM	4	0	0	4
4:30 PM	1	0	0	1
4:45 PM	1	0	0	1
5:00 PM	2	0	0	2
5:15 PM	4	0	0	4
5:30 PM	3	0	0	3
5:45 PM	1	0	0	1
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	1	0	0	1
6:45 PM	2	0	0	2
7:00 PM	0	0	0	0
7:15 PM	2	0	0	2
7:30 PM	1	0	0	1
7:45 PM	3	0	0	3
8:00 PM	1	0	0	1
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	1	0	0	1
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	1	0	0	1
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	120	4	1	125
Percentage	96.00%	3.20%	0.80%	
PM Peak	12:15 PM	12:30 PM	1:45 PM	1:00 PM
Volume	28	2	1	30

Day Total	269	13	4	286
Percentage	94.06%	4.55%	92 of 409	1.40%

Quinn Road (East Driveway)  
north of Massachusett Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 C

Count Date: Tuesday, February 4, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	1	1
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	1	0	0	1
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	1
7:45 AM	3	0	0	3
8:00 AM	2	0	0	2
8:15 AM	4	0	0	4
8:30 AM	4	0	0	4
8:45 AM	5	0	0	5
9:00 AM	2	0	0	2
9:15 AM	3	2	0	5
9:30 AM	1	0	0	1
9:45 AM	4	1	0	5
10:00 AM	8	1	0	9
10:15 AM	8	0	0	8
10:30 AM	6	0	0	6
10:45 AM	6	1	0	7
11:00 AM	5	0	1	6
11:15 AM	4	1	0	5
11:30 AM	3	0	0	3
11:45 AM	12	0	0	12

AM Total	81	7	2	90
Percentage	90.00%	7.78%	2.22%	
AM Peak	10:00 AM	9:15 AM	12:30 AM	10:00 AM
Volume	28	4	1	30

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	7	0	0	7
12:15 PM	6	1	0	7
12:30 PM	3	0	0	3
12:45 PM	8	0	0	8
1:00 PM	3	1	0	4
1:15 PM	8	1	0	9
1:30 PM	5	0	1	6
1:45 PM	6	0	0	6
2:00 PM	6	0	0	6
2:15 PM	3	1	0	4
2:30 PM	6	1	0	7
2:45 PM	5	1	1	7
3:00 PM	3	0	0	3
3:15 PM	3	0	0	3
3:30 PM	4	0	0	4
3:45 PM	4	0	0	4
4:00 PM	8	0	0	8
4:15 PM	4	0	0	4
4:30 PM	10	0	0	10
4:45 PM	4	0	0	4
5:00 PM	15	1	0	16
5:15 PM	5	0	0	5
5:30 PM	7	0	0	7
5:45 PM	4	0	0	4
6:00 PM	7	0	0	7
6:15 PM	4	0	0	4
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	1	0	0	1
7:30 PM	0	0	0	0
7:45 PM	5	0	0	5
8:00 PM	4	0	0	4
8:15 PM	1	0	0	1
8:30 PM	1	0	0	1
8:45 PM	1	0	0	1
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	1	0	0	1
9:45 PM	0	0	0	0
10:00 PM	1	0	0	1
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	1	0	0	1
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	164	7	2	173
Percentage	94.80%	4.05%	1.16%	
PM Peak	4:30 PM	2:00 PM	12:45 PM	4:30 PM
Volume	34	3	1	35

Day Total	245	14	4	263
Percentage	93.16%	5.32%	93 of 409	1.52%



Quinn Road (East Driveway)  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 C

Count Date: Wednesday, February 5, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	1	1
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	1	0	0	1
6:45 AM	1	0	0	1
7:00 AM	0	0	0	0
7:15 AM	1	0	0	1
7:30 AM	0	0	0	0
7:45 AM	2	0	0	2
8:00 AM	5	0	0	5
8:15 AM	3	0	1	4
8:30 AM	5	3	1	9
8:45 AM	0	1	0	1
9:00 AM	4	0	0	4
9:15 AM	7	0	0	7
9:30 AM	9	0	0	9
9:45 AM	5	0	0	5
10:00 AM	7	0	0	7
10:15 AM	6	0	0	6
10:30 AM	4	0	0	4
10:45 AM	0	1	0	1
11:00 AM	4	0	0	4
11:15 AM	7	0	0	7
11:30 AM	6	0	0	6
11:45 AM	10	0	0	10

AM Total	87	5	3	95
Percentage	91.58%	5.26%	3.16%	
AM Peak	9:15 AM	8:00 AM	7:45 AM	9:15 AM
Volume	28	4	2	28

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	5	0	1	6
12:15 PM	9	0	0	9
12:30 PM	6	0	0	6
12:45 PM	10	0	0	10
1:00 PM	4	1	0	5
1:15 PM	6	1	0	7
1:30 PM	12	0	0	12
1:45 PM	7	0	0	7
2:00 PM	8	0	0	8
2:15 PM	3	1	0	4
2:30 PM	7	0	0	7
2:45 PM	4	0	0	4
3:00 PM	8	1	1	10
3:15 PM	4	0	0	4
3:30 PM	5	0	0	5
3:45 PM	6	0	0	6
4:00 PM	4	1	0	5
4:15 PM	8	0	0	8
4:30 PM	3	0	1	4
4:45 PM	6	0	0	6
5:00 PM	10	0	0	10
5:15 PM	5	0	0	5
5:30 PM	8	0	0	8
5:45 PM	7	0	0	7
6:00 PM	6	0	0	6
6:15 PM	4	0	0	4
6:30 PM	1	0	0	1
6:45 PM	1	0	0	1
7:00 PM	1	0	0	1
7:15 PM	1	0	0	1
7:30 PM	3	0	0	3
7:45 PM	1	0	0	1
8:00 PM	3	0	0	3
8:15 PM	5	0	0	5
8:30 PM	0	0	0	0
8:45 PM	1	0	0	1
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	2	0	0	2
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	184	5	3	192
Percentage	95.83%	2.60%	1.56%	
PM Peak	1:15 PM	12:30 PM	12:00 PM	12:45 PM
Volume	33	2	1	34

Day Total	271	10	6	287
Percentage	94.43%	3.48%	94 of 409	2.09%

Quinn Road (East Driveway)  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 C

Direction: NB

## Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	10	0	4	0	0	0	0	0	0	0	0	0	0	0	7
12:15	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	5
12:30	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	7
12:45	0	23	0	10	0	0	0	0	0	0	0	0	0	0	0	17
1:00	0	2	0	7	0	0	0	0	0	0	0	0	0	0	0	5
1:15	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	3
1:30	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	4
1:45	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	6
2:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2
2:15	0	1	0	7	0	0	0	0	0	0	0	0	0	0	0	4
2:30	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	4
2:45	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	3	0	5	0	0	0	0	0	0	0	0	0	0	0	4
3:15	0	4	0	7	0	0	0	0	0	0	0	0	0	0	0	6
3:30	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:45	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
4:00	0	3	1	4	0	0	0	0	0	0	0	0	0	0	1	4
4:15	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0	4
4:30	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:45	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	2
5:00	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3
5:15	1	2	0	4	0	0	0	0	0	0	0	0	0	0	1	3
5:30	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	3
5:45	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1
6:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
6:15	6	0	7	0	0	0	0	0	0	0	0	0	0	0	7	0
6:30	0	0	9	1	0	0	0	0	0	0	0	0	0	0	5	1
6:45	6	1	8	2	0	0	0	0	0	0	0	0	0	0	7	2
7:00	5	0	8	0	0	0	0	0	0	0	0	0	0	0	7	0
7:15	9	1	6	2	0	0	0	0	0	0	0	0	0	0	8	2
7:30	4	1	4	1	0	0	0	0	0	0	0	0	0	0	4	1
7:45	11	1	3	3	0	0	0	0	0	0	0	0	0	0	7	2
8:00	13	2	11	1	0	0	0	0	0	0	0	0	0	0	12	2
8:15	7	0	8	0	0	0	0	0	0	0	0	0	0	0	8	0
8:30	4	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
8:45	7	0	13	1	0	0	0	0	0	0	0	0	0	0	10	1
9:00	10	0	8	0	0	0	0	0	0	0	0	0	0	0	9	0
9:15	10	1	9	0	0	0	0	0	0	0	0	0	0	0	10	1
9:30	1	0	12	0	0	0	0	0	0	0	0	0	0	0	7	0
9:45	10	0	6	1	0	0	0	0	0	0	0	0	0	0	8	1
10:00	10	1	5	0	0	0	0	0	0	0	0	0	0	0	8	1
10:15	4	0	6	0	0	0	0	0	0	0	0	0	0	0	5	0
10:30	10	0	2	0	0	0	0	0	0	0	0	0	0	0	6	0
10:45	6	1	0	0	0	0	0	0	0	0	0	0	0	0	3	1
11:00	2	0	7	0	0	0	0	0	0	0	0	0	0	0	5	0
11:15	8	0	8	0	0	0	0	0	0	0	0	0	0	0	8	0
11:30	7	0	6	0	0	0	0	0	0	0	0	0	0	0	7	0
11:45	4	0	8	0	0	0	0	0	0	0	0	0	0	0	6	0
Total	157	98	161	125	0	0	0	0	0	0	0	0	0	0	159	112
Day Total	255		286		0		0		0		0		0		271	
Peak HR	7:15 AM	12:00 PM	8:45 AM	1:00 PM												
Volume	37	45	42	30											35	36

Quinn Road (East Driveway)  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 C

Direction: SB

## Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
12:00	0	7	0	6	0	0	0	0	0	0	0	0	0	0	0	7		
12:15	0	7	0	9	0	0	0	0	0	0	0	0	0	0	0	8		
12:30	0	3	1	6	0	0	0	0	0	0	0	0	0	0	1	5		
12:45	0	8	0	10	0	0	0	0	0	0	0	0	0	0	0	9		
1:00	0	4	0	5	0	0	0	0	0	0	0	0	0	0	0	5		
1:15	1	9	0	7	0	0	0	0	0	0	0	0	0	0	1	8		
1:30	0	6	0	12	0	0	0	0	0	0	0	0	0	0	0	9		
1:45	0	6	0	7	0	0	0	0	0	0	0	0	0	0	0	7		
2:00	0	6	0	8	0	0	0	0	0	0	0	0	0	0	0	7		
2:15	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	4		
2:30	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	7		
2:45	0	7	0	4	0	0	0	0	0	0	0	0	0	0	0	6		
3:00	0	3	0	10	0	0	0	0	0	0	0	0	0	0	0	7		
3:15	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0	4		
3:30	0	4	0	5	0	0	0	0	0	0	0	0	0	0	0	5		
3:45	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0	5		
4:00	0	8	0	5	0	0	0	0	0	0	0	0	0	0	0	7		
4:15	0	4	0	8	0	0	0	0	0	0	0	0	0	0	0	6		
4:30	0	10	0	4	0	0	0	0	0	0	0	0	0	0	0	7		
4:45	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0	5		
5:00	0	16	0	10	0	0	0	0	0	0	0	0	0	0	0	13		
5:15	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	5		
5:30	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0	8		
5:45	0	4	0	7	0	0	0	0	0	0	0	0	0	0	0	6		
6:00	0	7	0	6	0	0	0	0	0	0	0	0	0	0	0	7		
6:15	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	4		
6:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1		
6:45	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1		
7:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1		
7:15	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1		
7:30	1	0	0	3	0	0	0	0	0	0	0	0	0	0	1	2		
7:45	3	5	2	1	0	0	0	0	0	0	0	0	0	0	3	3		
8:00	2	4	5	3	0	0	0	0	0	0	0	0	0	0	4	4		
8:15	4	1	4	5	0	0	0	0	0	0	0	0	0	0	4	3		
8:30	4	1	9	0	0	0	0	0	0	0	0	0	0	0	7	1		
8:45	5	1	1	1	0	0	0	0	0	0	0	0	0	0	3	1		
9:00	2	0	4	0	0	0	0	0	0	0	0	0	0	0	3	0		
9:15	5	0	7	0	0	0	0	0	0	0	0	0	0	0	6	0		
9:30	1	1	9	0	0	0	0	0	0	0	0	0	0	0	5	1		
9:45	5	0	5	2	0	0	0	0	0	0	0	0	0	0	5	1		
10:00	9	1	7	0	0	0	0	0	0	0	0	0	0	0	8	1		
10:15	8	0	6	0	0	0	0	0	0	0	0	0	0	0	7	0		
10:30	6	0	4	0	0	0	0	0	0	0	0	0	0	0	5	0		
10:45	7	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0		
11:00	6	0	4	0	0	0	0	0	0	0	0	0	0	0	5	0		
11:15	5	1	7	0	0	0	0	0	0	0	0	0	0	0	6	1		
11:30	3	0	6	0	0	0	0	0	0	0	0	0	0	0	5	0		
11:45	12	0	10	0	0	0	0	0	0	0	0	0	0	0	11	0		
Total	90	173	95	192	0	0	0	0	0	0	0	0	0	0	93	183		
Day Total	263		287		0		0		0		0		0		275			
Peak HR	10:00 AM	4:30 PM	9:15 AM	12:45 PM													11:00 AM	4:15 PM
Volume	30	35	28	34													27	31



Forest Street  
norht of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 D

Count Date: Tuesday, February 4, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	2	0	0	2
12:15 AM	1	0	0	1
12:30 AM	1	0	0	1
12:45 AM	0	0	0	0
1:00 AM	1	0	0	1
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	1	0	0	1
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	1	0	1
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	1	0	0	1
4:45 AM	0	0	0	0
5:00 AM	1	0	0	1
5:15 AM	1	0	0	1
5:30 AM	6	0	0	6
5:45 AM	7	0	0	7
6:00 AM	5	0	0	5
6:15 AM	6	0	0	6
6:30 AM	13	0	0	13
6:45 AM	19	0	0	19
7:00 AM	20	0	0	20
7:15 AM	15	1	0	16
7:30 AM	48	3	1	52
7:45 AM	58	0	0	58
8:00 AM	54	0	0	54
8:15 AM	26	0	0	26
8:30 AM	26	2	0	28
8:45 AM	26	0	1	27
9:00 AM	15	1	0	16
9:15 AM	11	0	1	12
9:30 AM	22	1	0	23
9:45 AM	21	1	0	22
10:00 AM	21	0	0	21
10:15 AM	18	2	0	20
10:30 AM	23	0	0	23
10:45 AM	32	0	0	32
11:00 AM	23	1	0	24
11:15 AM	20	2	1	23
11:30 AM	20	2	0	22
11:45 AM	18	1	0	19

AM Total	582	18	4	604
Percentage	96.36%	2.98%	0.66%	
AM Peak	7:30 AM	11:00 AM	8:30 AM	7:30 AM
Volume	186	6	2	190

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	26	0	0	26
12:15 PM	20	1	0	21
12:30 PM	40	1	0	41
12:45 PM	43	0	0	43
1:00 PM	37	1	0	38
1:15 PM	59	1	0	60
1:30 PM	40	2	0	42
1:45 PM	73	1	0	74
2:00 PM	48	1	0	49
2:15 PM	66	1	0	67
2:30 PM	69	2	1	72
2:45 PM	44	1	0	45
3:00 PM	54	3	0	57
3:15 PM	43	2	0	45
3:30 PM	36	1	0	37
3:45 PM	47	2	0	49
4:00 PM	48	0	0	48
4:15 PM	61	1	0	62
4:30 PM	52	0	0	52
4:45 PM	42	1	0	43
5:00 PM	76	2	0	78
5:15 PM	80	0	0	80
5:30 PM	66	1	0	67
5:45 PM	64	0	0	64
6:00 PM	63	0	0	63
6:15 PM	50	0	0	50
6:30 PM	35	0	0	35
6:45 PM	36	0	0	36
7:00 PM	25	0	0	25
7:15 PM	19	0	0	19
7:30 PM	24	0	0	24
7:45 PM	30	0	0	30
8:00 PM	17	0	0	17
8:15 PM	20	0	0	20
8:30 PM	16	0	0	16
8:45 PM	15	0	0	15
9:00 PM	21	0	0	21
9:15 PM	16	0	0	16
9:30 PM	15	0	0	15
9:45 PM	9	0	0	9
10:00 PM	13	0	0	13
10:15 PM	6	0	0	6
10:30 PM	3	0	0	3
10:45 PM	4	0	0	4
11:00 PM	4	0	0	4
11:15 PM	0	0	0	0
11:30 PM	1	0	0	1
11:45 PM	3	0	0	3

PM Total	1679	25	1	1705
Percentage	98.48%	1.47%	0.06%	
PM Peak	5:00 PM	2:30 PM	1:45 PM	5:00 PM
Volume	286	8	1	289

Day Total	2261	43	5	2309
Percentage	97.92%	1.86%	97 of 409	0.22%

Forest Street  
norht of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 D

Count Date: Wednesday, February 5, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	2	0	0	2
12:15 AM	1	0	0	1
12:30 AM	1	0	0	1
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	1	0	0	1
3:15 AM	0	0	0	0
3:30 AM	2	1	0	3
3:45 AM	0	0	0	0
4:00 AM	1	0	0	1
4:15 AM	0	0	0	0
4:30 AM	1	0	0	1
4:45 AM	1	0	0	1
5:00 AM	3	0	0	3
5:15 AM	4	0	0	4
5:30 AM	5	0	0	5
5:45 AM	2	0	0	2
6:00 AM	7	0	0	7
6:15 AM	6	1	0	7
6:30 AM	17	1	0	18
6:45 AM	18	5	0	23
7:00 AM	20	0	0	20
7:15 AM	19	0	0	19
7:30 AM	38	0	0	38
7:45 AM	57	0	0	57
8:00 AM	50	1	0	51
8:15 AM	41	1	0	42
8:30 AM	32	0	0	32
8:45 AM	27	1	0	28
9:00 AM	26	0	0	26
9:15 AM	12	0	0	12
9:30 AM	16	0	0	16
9:45 AM	17	0	0	17
10:00 AM	18	1	0	19
10:15 AM	15	0	0	15
10:30 AM	17	1	0	18
10:45 AM	18	2	0	20
11:00 AM	24	1	0	25
11:15 AM	16	1	0	17
11:30 AM	20	1	0	21
11:45 AM	20	0	0	20

AM Total	575	18	0	593
Percentage	96.96%	3.04%	0.00%	
AM Peak	7:30 AM	6:00 AM	12:00 AM	7:30 AM
Volume	186	7	0	188

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	26	2	0	28
12:15 PM	24	1	0	25
12:30 PM	24	2	0	26
12:45 PM	32	1	0	33
1:00 PM	29	1	0	30
1:15 PM	17	1	0	18
1:30 PM	21	2	0	23
1:45 PM	12	0	0	12
2:00 PM	25	1	0	26
2:15 PM	41	3	0	44
2:30 PM	48	1	1	50
2:45 PM	50	2	0	52
3:00 PM	61	1	0	62
3:15 PM	53	2	0	55
3:30 PM	69	0	0	69
3:45 PM	61	4	0	65
4:00 PM	58	0	0	58
4:15 PM	76	1	0	77
4:30 PM	64	0	0	64
4:45 PM	59	1	0	60
5:00 PM	67	0	0	67
5:15 PM	86	0	0	86
5:30 PM	87	1	0	88
5:45 PM	74	1	0	75
6:00 PM	50	0	0	50
6:15 PM	40	0	0	40
6:30 PM	32	0	0	32
6:45 PM	35	0	0	35
7:00 PM	24	0	0	24
7:15 PM	21	0	0	21
7:30 PM	26	0	0	26
7:45 PM	18	0	0	18
8:00 PM	22	0	0	22
8:15 PM	20	0	0	20
8:30 PM	24	0	0	24
8:45 PM	16	0	0	16
9:00 PM	16	0	0	16
9:15 PM	15	0	0	15
9:30 PM	7	0	0	7
9:45 PM	10	0	0	10
10:00 PM	2	0	0	2
10:15 PM	4	0	0	4
10:30 PM	4	0	0	4
10:45 PM	5	0	0	5
11:00 PM	1	0	0	1
11:15 PM	1	0	0	1
11:30 PM	4	0	0	4
11:45 PM	2	0	0	2

PM Total	1563	28	1	1592
Percentage	98.18%	1.76%	0.06%	
PM Peak	5:00 PM	2:00 PM	1:45 PM	5:00 PM
Volume	314	7	1	316

Day Total	2138	46	1	2185
Percentage	97.85%	2.11%	98 of 4090.05%	

Forest Street  
norht of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 D

Count Date: Tuesday, February 4, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	2	0	0	2
12:45 AM	2	0	0	2
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	1	0	0	1
2:15 AM	1	0	0	1
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	1	0	0	1
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	1	0	0	1
4:15 AM	2	0	0	2
4:30 AM	3	0	0	3
4:45 AM	2	0	0	2
5:00 AM	0	0	0	0
5:15 AM	3	0	0	3
5:30 AM	5	0	0	5
5:45 AM	6	0	1	7
6:00 AM	10	0	0	10
6:15 AM	17	0	0	17
6:30 AM	20	2	0	22
6:45 AM	35	2	0	37
7:00 AM	66	4	0	70
7:15 AM	64	2	1	67
7:30 AM	76	1	0	77
7:45 AM	69	0	0	69
8:00 AM	77	2	0	79
8:15 AM	55	1	0	56
8:30 AM	41	2	0	43
8:45 AM	39	2	0	41
9:00 AM	27	0	0	27
9:15 AM	34	0	0	34
9:30 AM	20	1	0	21
9:45 AM	22	0	1	23
10:00 AM	22	0	0	22
10:15 AM	22	1	0	23
10:30 AM	21	2	0	23
10:45 AM	21	1	0	22
11:00 AM	19	2	0	21
11:15 AM	25	4	0	29
11:30 AM	16	0	0	16
11:45 AM	12	2	1	15

AM Total	859	31	4	894
Percentage	96.09%	3.47%	0.45%	
AM Peak Volume	7:15 AM 286	6:30 AM 10	5:00 AM 1	7:15 AM 292

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	18	0	0	18
12:15 PM	30	0	0	30
12:30 PM	22	1	0	23
12:45 PM	22	1	0	23
1:00 PM	23	1	0	24
1:15 PM	22	1	0	23
1:30 PM	21	0	1	22
1:45 PM	22	0	0	22
2:00 PM	19	0	1	20
2:15 PM	24	2	0	26
2:30 PM	27	3	0	30
2:45 PM	25	0	0	25
3:00 PM	25	1	0	26
3:15 PM	18	4	0	22
3:30 PM	19	1	0	20
3:45 PM	17	0	0	17
4:00 PM	33	0	0	33
4:15 PM	25	0	0	25
4:30 PM	32	0	0	32
4:45 PM	33	0	0	33
5:00 PM	28	0	0	28
5:15 PM	24	0	0	24
5:30 PM	22	0	0	22
5:45 PM	32	0	0	32
6:00 PM	27	1	0	28
6:15 PM	29	0	0	29
6:30 PM	27	0	0	27
6:45 PM	20	0	0	20
7:00 PM	17	0	0	17
7:15 PM	17	0	0	17
7:30 PM	14	0	0	14
7:45 PM	10	0	0	10
8:00 PM	14	0	0	14
8:15 PM	21	0	0	21
8:30 PM	14	0	0	14
8:45 PM	9	0	0	9
9:00 PM	8	2	0	10
9:15 PM	9	0	0	9
9:30 PM	4	0	0	4
9:45 PM	4	0	0	4
10:00 PM	6	0	0	6
10:15 PM	5	0	0	5
10:30 PM	3	0	0	3
10:45 PM	6	0	0	6
11:00 PM	1	0	0	1
11:15 PM	0	0	0	0
11:30 PM	3	0	0	3
11:45 PM	3	0	0	3

PM Total	854	18	2	874
Percentage	97.71%	2.06%	0.23%	
PM Peak Volume	4:00 PM 123	2:30 PM 8	1:15 PM 2	4:00 PM 123

Day Total	1713	49	6	1768
Percentage	96.89%	2.77%	99 of 4090.34%	



Forest Street  
norht of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 D

Count Date: Wednesday, February 5, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	2	0	0	2
12:30 AM	2	0	0	2
12:45 AM	2	0	0	2
1:00 AM	2	0	0	2
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	1	0	0	1
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	1	0	0	1
4:00 AM	1	0	0	1
4:15 AM	2	0	0	2
4:30 AM	4	0	0	4
4:45 AM	1	0	0	1
5:00 AM	1	0	0	1
5:15 AM	2	0	0	2
5:30 AM	6	0	0	6
5:45 AM	9	0	0	9
6:00 AM	10	0	0	10
6:15 AM	21	0	0	21
6:30 AM	21	4	0	25
6:45 AM	40	4	0	44
7:00 AM	58	3	0	61
7:15 AM	63	0	0	63
7:30 AM	86	0	0	86
7:45 AM	70	1	0	71
8:00 AM	77	4	0	81
8:15 AM	63	0	0	63
8:30 AM	51	0	0	51
8:45 AM	35	0	0	35
9:00 AM	24	1	0	25
9:15 AM	18	0	0	18
9:30 AM	23	0	0	23
9:45 AM	24	0	0	24
10:00 AM	18	0	0	18
10:15 AM	16	2	0	18
10:30 AM	19	0	0	19
10:45 AM	17	1	0	18
11:00 AM	13	0	0	13
11:15 AM	29	2	0	31
11:30 AM	23	1	0	24
11:45 AM	22	4	0	26

AM Total	877	27	0	904
Percentage	97.01%	2.99%	0.00%	
AM Peak	7:15 AM	6:15 AM	12:00 AM	7:15 AM
Volume	296	11	0	301

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	27	1	0	28
12:15 PM	31	1	0	32
12:30 PM	24	1	0	25
12:45 PM	21	1	1	23
1:00 PM	19	0	0	19
1:15 PM	17	0	0	17
1:30 PM	18	1	0	19
1:45 PM	23	2	0	25
2:00 PM	18	3	0	21
2:15 PM	25	0	0	25
2:30 PM	22	0	0	22
2:45 PM	35	1	0	36
3:00 PM	24	0	0	24
3:15 PM	22	2	0	24
3:30 PM	25	1	0	26
3:45 PM	25	1	0	26
4:00 PM	29	1	0	30
4:15 PM	25	0	0	25
4:30 PM	32	0	0	32
4:45 PM	28	0	0	28
5:00 PM	37	0	0	37
5:15 PM	16	0	0	16
5:30 PM	38	1	0	39
5:45 PM	47	0	0	47
6:00 PM	53	1	0	54
6:15 PM	24	0	0	24
6:30 PM	26	0	0	26
6:45 PM	21	0	0	21
7:00 PM	11	0	0	11
7:15 PM	17	0	0	17
7:30 PM	11	0	0	11
7:45 PM	15	0	0	15
8:00 PM	22	1	0	23
8:15 PM	7	0	0	7
8:30 PM	9	0	0	9
8:45 PM	10	0	0	10
9:00 PM	12	0	0	12
9:15 PM	4	0	0	4
9:30 PM	4	0	0	4
9:45 PM	7	0	0	7
10:00 PM	1	0	0	1
10:15 PM	3	0	0	3
10:30 PM	1	0	0	1
10:45 PM	4	0	0	4
11:00 PM	1	0	0	1
11:15 PM	0	0	0	0
11:30 PM	2	0	0	2
11:45 PM	4	0	0	4

PM Total	897	19	1	917
Percentage	97.82%	2.07%	0.11%	
PM Peak	5:30 PM	1:15 PM	12:00 PM	5:30 PM
Volume	162	6	1	164

Day Total	1774	46	1	1821
Percentage	97.42%	2.53%	100 of 409	0.05%

Forest Street  
norht of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 D

Direction: NB

### Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	2	26	2	28	0	0	0	0	0	0	0	0	0	0	2	27
12:15	1	21	1	25	0	0	0	0	0	0	0	0	0	0	1	23
12:30	1	41	1	26	0	0	0	0	0	0	0	0	0	0	1	34
12:45	0	43	0	33	0	0	0	0	0	0	0	0	0	0	0	38
1:00	1	38	0	30	0	0	0	0	0	0	0	0	0	0	1	34
1:15	0	60	0	18	0	0	0	0	0	0	0	0	0	0	0	39
1:30	0	42	0	23	0	0	0	0	0	0	0	0	0	0	0	33
1:45	0	74	0	12	0	0	0	0	0	0	0	0	0	0	0	43
2:00	1	49	0	26	0	0	0	0	0	0	0	0	0	0	1	38
2:15	0	67	0	44	0	0	0	0	0	0	0	0	0	0	0	56
2:30	0	72	0	50	0	0	0	0	0	0	0	0	0	0	0	61
2:45	0	45	0	52	0	0	0	0	0	0	0	0	0	0	0	49
3:00	1	57	1	62	0	0	0	0	0	0	0	0	0	0	1	60
3:15	0	45	0	55	0	0	0	0	0	0	0	0	0	0	0	50
3:30	0	37	3	69	0	0	0	0	0	0	0	0	0	0	2	53
3:45	0	49	0	65	0	0	0	0	0	0	0	0	0	0	0	57
4:00	0	48	1	58	0	0	0	0	0	0	0	0	0	0	1	53
4:15	0	62	0	77	0	0	0	0	0	0	0	0	0	0	0	70
4:30	1	52	1	64	0	0	0	0	0	0	0	0	0	0	1	58
4:45	0	43	1	60	0	0	0	0	0	0	0	0	0	0	1	52
5:00	1	78	3	67	0	0	0	0	0	0	0	0	0	0	2	73
5:15	1	80	4	86	0	0	0	0	0	0	0	0	0	0	3	83
5:30	6	67	5	88	0	0	0	0	0	0	0	0	0	0	6	78
5:45	7	64	2	75	0	0	0	0	0	0	0	0	0	0	5	70
6:00	5	63	7	50	0	0	0	0	0	0	0	0	0	0	6	57
6:15	6	50	7	40	0	0	0	0	0	0	0	0	0	0	7	45
6:30	13	35	18	32	0	0	0	0	0	0	0	0	0	0	16	34
6:45	19	36	23	35	0	0	0	0	0	0	0	0	0	0	21	36
7:00	20	25	20	24	0	0	0	0	0	0	0	0	0	0	20	25
7:15	16	19	19	21	0	0	0	0	0	0	0	0	0	0	18	20
7:30	52	24	38	26	0	0	0	0	0	0	0	0	0	0	45	25
7:45	58	30	57	18	0	0	0	0	0	0	0	0	0	0	58	24
8:00	54	17	51	22	0	0	0	0	0	0	0	0	0	0	53	20
8:15	26	20	42	20	0	0	0	0	0	0	0	0	0	0	34	20
8:30	28	16	32	24	0	0	0	0	0	0	0	0	0	0	30	20
8:45	27	15	28	16	0	0	0	0	0	0	0	0	0	0	28	16
9:00	16	21	26	16	0	0	0	0	0	0	0	0	0	0	21	19
9:15	12	16	12	15	0	0	0	0	0	0	0	0	0	0	12	16
9:30	23	15	16	7	0	0	0	0	0	0	0	0	0	0	20	11
9:45	22	9	17	10	0	0	0	0	0	0	0	0	0	0	20	10
10:00	21	13	19	2	0	0	0	0	0	0	0	0	0	0	20	8
10:15	20	6	15	4	0	0	0	0	0	0	0	0	0	0	18	5
10:30	23	3	18	4	0	0	0	0	0	0	0	0	0	0	21	4
10:45	32	4	20	5	0	0	0	0	0	0	0	0	0	0	26	5
11:00	24	4	25	1	0	0	0	0	0	0	0	0	0	0	25	3
11:15	23	0	17	1	0	0	0	0	0	0	0	0	0	0	20	1
11:30	22	1	21	4	0	0	0	0	0	0	0	0	0	0	22	3
11:45	19	3	20	2	0	0	0	0	0	0	0	0	0	0	20	3
Total	604	1705	593	1592	0	0	0	0	0	0	0	0	0	0	599	1649
Day Total	2309		2185		0		0		0		0		0		2247	
Peak HR	7:30 AM	5:00 PM	7:30 AM	5:00 PM											7:30 AM	5:00 PM
Volume	190	289	188	316											189	303

Forest Street  
norht of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 D

Direction: SB

## Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	18	0	28	0	0	0	0	0	0	0	0	0	0	0	23
12:15	0	30	2	32	0	0	0	0	0	0	0	0	0	0	1	31
12:30	2	23	2	25	0	0	0	0	0	0	0	0	0	0	2	24
12:45	2	23	2	23	0	0	0	0	0	0	0	0	0	0	2	23
1:00	0	24	2	19	0	0	0	0	0	0	0	0	0	0	1	22
1:15	0	23	0	17	0	0	0	0	0	0	0	0	0	0	0	20
1:30	0	22	0	19	0	0	0	0	0	0	0	0	0	0	0	21
1:45	0	22	0	25	0	0	0	0	0	0	0	0	0	0	0	24
2:00	1	20	1	21	0	0	0	0	0	0	0	0	0	0	1	21
2:15	1	26	0	25	0	0	0	0	0	0	0	0	0	0	1	26
2:30	0	30	0	22	0	0	0	0	0	0	0	0	0	0	0	26
2:45	0	25	0	36	0	0	0	0	0	0	0	0	0	0	0	31
3:00	0	26	0	24	0	0	0	0	0	0	0	0	0	0	0	25
3:15	1	22	0	24	0	0	0	0	0	0	0	0	0	0	1	23
3:30	0	20	0	26	0	0	0	0	0	0	0	0	0	0	0	23
3:45	0	17	1	26	0	0	0	0	0	0	0	0	0	0	1	22
4:00	1	33	1	30	0	0	0	0	0	0	0	0	0	0	1	32
4:15	2	25	2	25	0	0	0	0	0	0	0	0	0	0	2	25
4:30	3	32	4	32	0	0	0	0	0	0	0	0	0	0	4	32
4:45	2	33	1	28	0	0	0	0	0	0	0	0	0	0	2	31
5:00	0	28	1	37	0	0	0	0	0	0	0	0	0	0	1	33
5:15	3	24	2	16	0	0	0	0	0	0	0	0	0	0	3	20
5:30	5	22	6	39	0	0	0	0	0	0	0	0	0	0	6	31
5:45	7	32	9	47	0	0	0	0	0	0	0	0	0	0	8	40
6:00	10	28	10	54	0	0	0	0	0	0	0	0	0	0	10	41
6:15	17	29	21	24	0	0	0	0	0	0	0	0	0	0	19	27
6:30	22	27	25	26	0	0	0	0	0	0	0	0	0	0	24	27
6:45	37	20	44	21	0	0	0	0	0	0	0	0	0	0	41	21
7:00	70	17	61	11	0	0	0	0	0	0	0	0	0	0	66	14
7:15	67	17	63	17	0	0	0	0	0	0	0	0	0	0	65	17
7:30	77	14	86	11	0	0	0	0	0	0	0	0	0	0	82	13
7:45	69	10	71	15	0	0	0	0	0	0	0	0	0	0	70	13
8:00	79	14	81	23	0	0	0	0	0	0	0	0	0	0	80	19
8:15	56	21	63	7	0	0	0	0	0	0	0	0	0	0	60	14
8:30	43	14	51	9	0	0	0	0	0	0	0	0	0	0	47	12
8:45	41	9	35	10	0	0	0	0	0	0	0	0	0	0	38	10
9:00	27	10	25	12	0	0	0	0	0	0	0	0	0	0	26	11
9:15	34	9	18	4	0	0	0	0	0	0	0	0	0	0	26	7
9:30	21	4	23	4	0	0	0	0	0	0	0	0	0	0	22	4
9:45	23	4	24	7	0	0	0	0	0	0	0	0	0	0	24	6
10:00	22	6	18	1	0	0	0	0	0	0	0	0	0	0	20	4
10:15	23	5	18	3	0	0	0	0	0	0	0	0	0	0	21	4
10:30	23	3	19	1	0	0	0	0	0	0	0	0	0	0	21	2
10:45	22	6	18	4	0	0	0	0	0	0	0	0	0	0	20	5
11:00	21	1	13	1	0	0	0	0	0	0	0	0	0	0	17	1
11:15	29	0	31	0	0	0	0	0	0	0	0	0	0	0	30	0
11:30	16	3	24	2	0	0	0	0	0	0	0	0	0	0	20	3
11:45	15	3	26	4	0	0	0	0	0	0	0	0	0	0	21	4
Total	894	874	904	917	0	0	0	0	0	0	0	0	0	0	899	896
Day Total	1768		1821		0		0		0		0		0		1795	
Peak HR	7:15 AM	4:00 PM	7:15 AM	5:30 PM											7:15 AM	5:30 PM
Volume	292	123	301	164											297	138



Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 E

Count Date: Tuesday, February 4, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	1	0	0	1
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	1	0	0	1
6:15 AM	3	0	0	3
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	3	0	0	3
7:15 AM	3	0	0	3
7:30 AM	9	0	0	9
7:45 AM	17	0	0	17
8:00 AM	1	0	0	1
8:15 AM	3	0	0	3
8:30 AM	6	0	0	6
8:45 AM	4	1	0	5
9:00 AM	2	0	0	2
9:15 AM	3	0	0	3
9:30 AM	3	0	0	3
9:45 AM	1	0	0	1
10:00 AM	1	0	0	1
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	2	0	0	2
11:30 AM	0	0	0	0
11:45 AM	2	0	0	2

AM Total	65	1	0	66
Percentage	98.48%	1.52%	0.00%	
AM Peak	7:00 AM	8:00 AM	12:00 AM	7:00 AM
Volume	32	1	0	32

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	5	0	0	5
12:15 PM	3	0	0	3
12:30 PM	5	1	0	6
12:45 PM	2	0	0	2
1:00 PM	8	1	0	9
1:15 PM	10	0	0	10
1:30 PM	8	0	0	8
1:45 PM	11	0	0	11
2:00 PM	9	0	0	9
2:15 PM	14	0	0	14
2:30 PM	20	0	0	20
2:45 PM	7	1	0	8
3:00 PM	6	0	0	6
3:15 PM	1	0	0	1
3:30 PM	9	0	0	9
3:45 PM	2	0	0	2
4:00 PM	1	0	0	1
4:15 PM	4	0	0	4
4:30 PM	1	0	0	1
4:45 PM	0	0	0	0
5:00 PM	1	0	0	1
5:15 PM	3	0	0	3
5:30 PM	3	0	0	3
5:45 PM	5	0	0	5
6:00 PM	3	0	0	3
6:15 PM	1	0	0	1
6:30 PM	1	0	0	1
6:45 PM	4	0	0	4
7:00 PM	1	0	0	1
7:15 PM	1	0	0	1
7:30 PM	1	0	0	1
7:45 PM	0	0	0	0
8:00 PM	1	0	0	1
8:15 PM	0	0	0	0
8:30 PM	1	0	0	1
8:45 PM	0	0	0	0
9:00 PM	1	0	0	1
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	1	0	0	1
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	154	3	0	157
Percentage	98.09%	1.91%	0.00%	
PM Peak	1:45 PM	12:15 PM	12:00 PM	1:45 PM
Volume	54	2	0	54

Day Total	219	4	0	223
Percentage	98.21%	1.79%	103 of 409	0.00%

Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 E

Count Date: Wednesday, February 5, 2020  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	1	0	0	1
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	1	0	0	1
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	2	0	0	2
6:30 AM	1	0	0	1
6:45 AM	0	0	0	0
7:00 AM	3	0	0	3
7:15 AM	4	0	0	4
7:30 AM	14	0	0	14
7:45 AM	17	0	0	17
8:00 AM	2	0	0	2
8:15 AM	5	0	0	5
8:30 AM	6	0	0	6
8:45 AM	3	0	0	3
9:00 AM	2	0	0	2
9:15 AM	3	0	0	3
9:30 AM	1	1	0	2
9:45 AM	1	0	0	1
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	2	0	0	2
10:45 AM	2	0	0	2
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	1	0	0	1
11:45 AM	1	0	0	1

AM Total	72	1	0	73
Percentage	98.63%	1.37%	0.00%	
AM Peak Volume	7:00 AM 38	8:45 AM 1	12:00 AM 0	7:00 AM 38

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	0	0
12:15 PM	4	0	0	4
12:30 PM	3	2	0	5
12:45 PM	2	0	0	2
1:00 PM	3	0	0	3
1:15 PM	1	0	0	1
1:30 PM	1	1	0	2
1:45 PM	0	0	0	0
2:00 PM	2	0	0	2
2:15 PM	2	0	0	2
2:30 PM	8	0	0	8
2:45 PM	6	0	0	6
3:00 PM	4	0	0	4
3:15 PM	4	0	0	4
3:30 PM	8	0	0	8
3:45 PM	4	0	0	4
4:00 PM	4	0	0	4
4:15 PM	4	0	0	4
4:30 PM	3	0	0	3
4:45 PM	1	0	0	1
5:00 PM	4	0	0	4
5:15 PM	2	0	0	2
5:30 PM	2	0	0	2
5:45 PM	6	0	0	6
6:00 PM	1	0	0	1
6:15 PM	1	0	0	1
6:30 PM	0	0	0	0
6:45 PM	1	0	0	1
7:00 PM	1	0	0	1
7:15 PM	2	0	0	2
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	2	0	0	2
8:15 PM	1	0	0	1
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	2	0	0	2
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	1	0	0	1
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	90	3	0	93
Percentage	96.77%	3.23%	0.00%	
PM Peak Volume	2:30 PM 22	12:00 PM 2	12:00 PM 0	2:30 PM 22

Day Total	162	4	0	166
Percentage	97.59%	2.41%	104 of 409	0.00%

Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 E

Count Date: Tuesday, February 4, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	1	0	0	1
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	1	0	0	1
7:00 AM	4	0	0	4
7:15 AM	3	0	0	3
7:30 AM	12	0	0	12
7:45 AM	15	0	0	15
8:00 AM	4	0	0	4
8:15 AM	1	0	0	1
8:30 AM	0	0	0	0
8:45 AM	2	0	0	2
9:00 AM	0	0	0	0
9:15 AM	1	0	0	1
9:30 AM	0	0	0	0
9:45 AM	3	0	0	3
10:00 AM	1	0	0	1
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	1	0	0	1
11:15 AM	3	0	0	3
11:30 AM	2	0	0	2
11:45 AM	1	0	0	1

AM Total	55	0	0	55
Percentage	100.00%	0.00%	0.00%	
AM Peak	7:00 AM	12:00 AM	12:00 AM	7:00 AM
Volume	34	0	0	34

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	2	1	0	3
12:15 PM	0	0	0	0
12:30 PM	2	0	0	2
12:45 PM	45	2	0	47
1:00 PM	53	1	0	54
1:15 PM	89	2	0	91
1:30 PM	73	3	0	76
1:45 PM	55	4	0	59
2:00 PM	58	0	0	58
2:15 PM	76	1	0	77
2:30 PM	35	3	0	38
2:45 PM	2	0	0	2
3:00 PM	2	0	0	2
3:15 PM	1	0	0	1
3:30 PM	0	0	0	0
3:45 PM	1	0	0	1
4:00 PM	3	0	0	3
4:15 PM	3	0	0	3
4:30 PM	1	0	0	1
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	3	0	0	3
5:30 PM	1	0	0	1
5:45 PM	6	0	0	6
6:00 PM	1	0	0	1
6:15 PM	0	0	0	0
6:30 PM	2	0	0	2
6:45 PM	0	0	0	0
7:00 PM	1	0	0	1
7:15 PM	0	0	0	0
7:30 PM	1	0	0	1
7:45 PM	1	0	0	1
8:00 PM	0	0	0	0
8:15 PM	2	0	0	2
8:30 PM	1	0	0	1
8:45 PM	0	0	0	0
9:00 PM	1	0	0	1
9:15 PM	1	0	0	1
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	1	0	0	1
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	523	17	0	540
Percentage	96.85%	3.15%	0.00%	
PM Peak	1:15 PM	1:00 PM	12:00 PM	1:15 PM
Volume	275	10	0	284

Day Total	578	17	0	595
Percentage	97.14%	2.86%	105 of 409	0.00%



Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File #

207450 E

Count Date: Wednesday, February 5, 2020  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	1	0	0	1
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	2	0	0	2
7:00 AM	2	0	0	2
7:15 AM	5	0	0	5
7:30 AM	15	0	0	15
7:45 AM	15	0	0	15
8:00 AM	1	0	0	1
8:15 AM	1	0	0	1
8:30 AM	0	0	0	0
8:45 AM	1	0	0	1
9:00 AM	2	0	0	2
9:15 AM	1	0	0	1
9:30 AM	1	0	0	1
9:45 AM	1	0	0	1
10:00 AM	1	0	0	1
10:15 AM	2	0	0	2
10:30 AM	0	0	0	0
10:45 AM	2	0	0	2
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	3	0	0	3
11:45 AM	2	0	0	2

AM Total	58	0	0	58
Percentage	100.00%	0.00%	0.00%	
AM Peak	7:00 AM	12:00 AM	12:00 AM	7:00 AM
Volume	37	0	0	37

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	2	0	0	2
12:15 PM	2	0	0	2
12:30 PM	1	0	0	1
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	1	0	1
1:30 PM	0	0	0	0
1:45 PM	1	0	0	1
2:00 PM	1	0	0	1
2:15 PM	4	0	0	4
2:30 PM	3	0	0	3
2:45 PM	1	0	0	1
3:00 PM	3	0	0	3
3:15 PM	0	0	0	0
3:30 PM	3	0	0	3
3:45 PM	3	0	0	3
4:00 PM	2	0	0	2
4:15 PM	3	0	0	3
4:30 PM	3	0	0	3
4:45 PM	1	0	0	1
5:00 PM	3	0	0	3
5:15 PM	1	0	0	1
5:30 PM	3	0	0	3
5:45 PM	2	0	0	2
6:00 PM	0	0	0	0
6:15 PM	2	0	0	2
6:30 PM	0	0	0	0
6:45 PM	2	0	0	2
7:00 PM	0	0	0	0
7:15 PM	2	0	0	2
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	2	0	0	2
8:15 PM	0	0	0	0
8:30 PM	1	0	0	1
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	1	0	0	1
10:15 PM	1	0	0	1
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0

PM Total	53	1	0	54
Percentage	98.15%	1.85%	0.00%	
PM Peak	2:15 PM	12:30 PM	12:00 PM	2:15 PM
Volume	11	1	0	11

Day Total	111	1	0	112
Percentage	99.11%	0.89%	106 of 409	0.00%

Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 E

Direction: NB

# Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15	0	3	1	4	0	0	0	0	0	0	0	0	0	0	1	4
12:30	0	6	0	5	0	0	0	0	0	0	0	0	0	0	0	6
12:45	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00	0	9	0	3	0	0	0	0	0	0	0	0	0	0	0	6
1:15	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	6
1:30	0	8	0	2	0	0	0	0	0	0	0	0	0	0	0	5
1:45	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	6
2:00	0	9	0	2	0	0	0	0	0	0	0	0	0	0	0	6
2:15	0	14	0	2	0	0	0	0	0	0	0	0	0	0	0	8
2:30	0	20	0	8	0	0	0	0	0	0	0	0	0	0	0	14
2:45	0	8	0	6	0	0	0	0	0	0	0	0	0	0	0	7
3:00	0	6	0	4	0	0	0	0	0	0	0	0	0	0	0	5
3:15	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	3
3:30	0	9	0	8	0	0	0	0	0	0	0	0	0	0	0	9
3:45	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0	3
4:00	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	3
4:15	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	4
4:30	1	1	1	3	0	0	0	0	0	0	0	0	0	0	1	2
4:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	3
5:15	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3
5:30	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3
5:45	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0	6
6:00	1	3	0	1	0	0	0	0	0	0	0	0	0	0	1	2
6:15	3	1	2	1	0	0	0	0	0	0	0	0	0	0	3	1
6:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
6:45	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	3
7:00	3	1	3	1	0	0	0	0	0	0	0	0	0	0	3	1
7:15	3	1	4	2	0	0	0	0	0	0	0	0	0	0	4	2
7:30	9	1	14	0	0	0	0	0	0	0	0	0	0	0	12	1
7:45	17	0	17	0	0	0	0	0	0	0	0	0	0	0	17	0
8:00	1	1	2	2	0	0	0	0	0	0	0	0	0	0	2	2
8:15	3	0	5	1	0	0	0	0	0	0	0	0	0	0	4	1
8:30	6	1	6	0	0	0	0	0	0	0	0	0	0	0	6	1
8:45	5	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0
9:00	2	1	2	2	0	0	0	0	0	0	0	0	0	0	2	2
9:15	3	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
9:30	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
9:45	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
10:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0
10:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
11:45	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
Total Day Total	66	157	73	93	0	0	0	0	0	0	0	0	0	0	70	125
	223		166		0		0		0		0		0		195	
Peak HR	7:00 AM	1:45 PM	7:00 AM	2:30 PM												
Volume	32	54	38	22											35	35

Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD



PDI File # 207450 E

Direction: SB

## Weekly Report

Day Date	Tuesday 02/04/20		Wednesday 02/05/20												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3
12:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
12:30	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2
12:45	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	24
1:00	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	27
1:15	0	91	0	1	0	0	0	0	0	0	0	0	0	0	0	46
1:30	0	76	0	0	0	0	0	0	0	0	0	0	0	0	0	38
1:45	0	59	0	1	0	0	0	0	0	0	0	0	0	0	0	30
2:00	0	58	0	1	0	0	0	0	0	0	0	0	0	0	0	30
2:15	0	77	0	4	0	0	0	0	0	0	0	0	0	0	0	41
2:30	0	38	0	3	0	0	0	0	0	0	0	0	0	0	0	21
2:45	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2
3:00	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2
3:45	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	2
4:00	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3
4:15	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	3
4:30	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	2
4:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2
5:15	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	2
5:30	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	2
5:45	1	6	1	2	0	0	0	0	0	0	0	0	0	0	1	4
6:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
6:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45	1	0	2	2	0	0	0	0	0	0	0	0	0	0	2	1
7:00	4	1	2	0	0	0	0	0	0	0	0	0	0	0	3	1
7:15	3	0	5	2	0	0	0	0	0	0	0	0	0	0	4	1
7:30	12	1	15	0	0	0	0	0	0	0	0	0	0	0	14	1
7:45	15	1	15	0	0	0	0	0	0	0	0	0	0	0	15	1
8:00	4	0	1	2	0	0	0	0	0	0	0	0	0	0	3	1
8:15	1	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1
8:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:45	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
9:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	1
9:15	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
9:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
9:45	3	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
10:00	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1
10:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	1	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0
11:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11:15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
11:30	2	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
11:45	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
Total Day Total	55	540	58	54	0	0	0	0	0	0	0	0	0	0	57	297
	595		112		0		0		0		0		0		354	
Peak HR	7:00 AM	1:15 PM	7:00 AM	2:15 PM												
Volume	34	284	37	11											36	144





Location Map: 207450 Arlington, MA

Precision Data Industries, LLC 46 Morton Street, Framingham, MA 01702 ph: 508-875-0100 email: datarequests@pdillc.com



Client: Nitsch Engineering	Engineer: B. Zimolka	Site Code: TBD	Date: Tues 2/4-Wed 2/5/20	PDI Job # 207450	City, State: Arlington, MA
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PDI File #: **207450 A**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Cars and Heavy Vehicles (Combined)

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	72	61	0	0	133	2	0	3	3	0	8	0	22	0	1	0	23	2	1	83	0	0	86	250
7:15 AM	0	0	0	0	0	0	0	72	54	1	0	127	2	0	2	1	0	5	1	24	0	2	0	27	6	1	95	0	0	102	261
7:30 AM	0	0	0	0	0	0	0	71	76	0	0	147	4	0	1	1	0	6	1	31	0	2	0	34	6	5	84	0	0	95	282
7:45 AM	0	0	0	0	0	0	0	88	61	5	0	154	7	0	6	29	0	42	6	31	0	3	0	40	16	7	103	0	0	126	362
Total	0	0	0	0	0	0	0	303	252	6	0	561	15	0	12	34	0	61	8	108	0	8	0	124	30	14	365	0	0	409	1155
8:00 AM	0	0	0	0	0	0	0	117	65	4	0	186	4	0	3	4	0	11	0	46	0	1	0	47	4	2	66	0	0	72	316
8:15 AM	0	0	0	0	0	0	0	73	63	2	0	138	3	0	1	1	0	5	1	37	0	0	0	38	4	1	78	0	0	83	264
8:30 AM	0	0	0	0	0	0	0	72	51	3	0	126	2	0	0	4	0	6	1	29	0	5	0	35	5	0	84	0	0	89	256
8:45 AM	0	0	0	0	0	0	0	92	47	3	0	142	0	0	2	1	0	3	0	30	0	2	0	32	1	3	83	1	0	88	265
Total	0	0	0	0	0	0	0	354	226	12	0	592	9	0	6	10	0	25	2	142	0	8	0	152	14	6	311	1	0	332	1101
Grand Total	0	0	0	0	0	0	0	657	478	18	0	1153	24	0	18	44	0	86	10	250	0	16	0	276	44	20	676	1	0	741	2256
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	57.0	41.5	1.6	0.0		27.9	0.0	20.9	51.2	0.0		3.6	90.6	0.0	5.8	0.0		5.9	2.7	91.2	0.1	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1	21.2	0.8	0.0	51.1	1.1	0.0	0.8	2.0	0.0	3.8	0.4	11.1	0.0	0.7	0.0	12.2	2.0	0.9	30.0	0.0	0.0	32.8	
Exiting Leg Total	1						950						48						566						691						2256
Cars	0	0	0	0	0	0	0	600	465	18	0	1083	24	0	17	41	0	82	9	247	0	15	0	271	43	19	613	1	0	676	2112
% Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.3	97.3	100.0	0.0	93.9	100.0	0.0	94.4	93.2	0.0	95.3	90.0	98.8	0.0	93.8	0.0	98.2	97.7	95.0	90.7	100.0	0.0	91.2	93.6
Exiting Leg Total	1						884						46						549						632						2112
Heavy Vehicles	0	0	0	0	0	0	0	57	13	0	0	70	0	0	1	3	0	4	1	3	0	1	0	5	1	1	63	0	0	65	144
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7	2.7	0.0	0.0	6.1	0.0	0.0	5.6	6.8	0.0	4.7	10.0	1.2	0.0	6.3	0.0	1.8	2.3	5.0	9.3	0.0	0.0	8.8	6.4
Exiting Leg Total	0						66						2						17						59						144

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
7:30 AM	0	0	0	0	0	0	0	71	76	0	0	147	4	0	1	1	0	6	1	31	0	2	0	34	6	5	84	0	0	95	282
7:45 AM	0	0	0	0	0	0	0	88	61	5	0	154	7	0	6	29	0	42	6	31	0	3	0	40	16	7	103	0	0	126	362
8:00 AM	0	0	0	0	0	0	0	117	65	4	0	186	4	0	3	4	0	11	0	46	0	1	0	47	4	2	66	0	0	72	316
8:15 AM	0	0	0	0	0	0	0	73	63	2	0	138	3	0	1	1	0	5	1	37	0	0	0	38	4	1	78	0	0	83	264
Total Volume	0	0	0	0	0	0	0	349	265	11	0	625	18	0	11	35	0	64	8	145	0	6	0	159	30	15	331	0	0	376	1224
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	55.8	42.4	1.8	0.0		28.1	0.0	17.2	54.7	0.0		5.0	91.2	0.0	3.8	0.0		8.0	4.0	88.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.746	0.872	0.550	0.000	0.840	0.643	0.000	0.458	0.302	0.000	0.381	0.333	0.788	0.000	0.500	0.000	0.846	0.469	0.536	0.803	0.000	0.000	0.746	0.845
Cars	0	0	0	0	0	0	0	325	259	11	0	595	18	0	11	33	0	62	8	143	0	6	0	157	29	15	294	0	0	338	1152
Cars %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.1	97.7	100.0	0.0	95.2	100.0	0.0	100.0	94.3	0.0	96.9	100.0	98.6	0.0	100.0	0.0	98.7	96.7	100.0	88.8	0.0	0.0	89.9	94.1
Heavy Vehicles	0	0	0	0	0	0	0	24	6	0	0	30	0	0	0	2	0	2	0	2	0	0	0	2	1	0	37	0	0	38	72
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	2.3	0.0	0.0	4.8	0.0	0.0	0.0	5.7	0.0	3.1	0.0	1.4	0.0	0.0	0.0	1.3	3.3	0.0	11.2	0.0	0.0	10.1	5.9
Cars Enter Leg	0	0	0	0	0	0	0	325	259	11	0	595	18	0	11	33	0	62	8	143	0	6	0	157	29	15	294	0	0	338	1152
Heavy Enter Leg	0	0	0	0	0	0	0	24	6	0	0	30	0	0	0	2	0	2	0	2	0	0	0	2	1	0	37	0	0	38	72
Total Entering Leg	0	0	0	0	0	0	0	349	265	11	0	625	18	0	11	35	0	64	8	145	0	6	0	159	30	15	331	0	0	376	1224
Cars Exiting Leg							455						34						330						366						1152
Heavy Exiting Leg							39						0						9						24						72
Total Exiting Leg							494						34						330						366						1224

PDI File #: **207450 A**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars**

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	59	61	0	0	120	2	0	3	2	0	7	0	21	0	1	0	22	2	1	75	0	0	78	227
7:15 AM	0	0	0	0	0	0	0	65	51	1	0	117	2	0	1	1	0	4	0	24	0	1	0	25	6	1	87	0	0	94	240
7:30 AM	0	0	0	0	0	0	0	63	76	0	0	139	4	0	1	1	0	6	1	30	0	2	0	33	6	5	72	0	0	83	261
7:45 AM	0	0	0	0	0	0	0	81	60	5	0	146	7	0	6	27	0	40	6	30	0	3	0	39	15	7	94	0	0	116	341
Total	0	0	0	0	0	0	0	268	248	6	0	522	15	0	11	31	0	57	7	105	0	7	0	119	29	14	328	0	0	371	1069
8:00 AM	0	0	0	0	0	0	0	111	64	4	0	179	4	0	3	4	0	11	0	46	0	1	0	47	4	2	61	0	0	67	304
8:15 AM	0	0	0	0	0	0	0	70	59	2	0	131	3	0	1	1	0	5	1	37	0	0	0	38	4	1	67	0	0	72	246
8:30 AM	0	0	0	0	0	0	0	66	49	3	0	118	2	0	0	4	0	6	1	29	0	5	0	35	5	0	80	0	0	85	244
8:45 AM	0	0	0	0	0	0	0	85	45	3	0	133	0	0	2	1	0	3	0	30	0	2	0	32	1	2	77	1	0	81	249
Total	0	0	0	0	0	0	0	332	217	12	0	561	9	0	6	10	0	25	2	142	0	8	0	152	14	5	285	1	0	305	1043
Grand Total	0	0	0	0	0	0	0	600	465	18	0	1083	24	0	17	41	0	82	9	247	0	15	0	271	43	19	613	1	0	676	2112
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	55.4	42.9	1.7	0.0		29.3	0.0	20.7	50.0	0.0		3.3	91.1	0.0	5.5	0.0		6.4	2.8	90.7	0.1	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	22.0	0.9	0.0	51.3	1.1	0.0	0.8	1.9	0.0	3.9	0.4	11.7	0.0	0.7	0.0	12.8	2.0	0.9	29.0	0.0	0.0	32.0	
Exiting Leg Total	1						884						46						549						632						2112

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
7:30 AM	0	0	0	0	0	0	0	63	76	0	0	139	4	0	1	1	0	6	1	30	0	2	0	33	6	5	72	0	0	83	261
7:45 AM	0	0	0	0	0	0	0	81	60	5	0	146	7	0	6	27	0	40	6	30	0	3	0	39	15	7	94	0	0	116	341
8:00 AM	0	0	0	0	0	0	0	111	64	4	0	179	4	0	3	4	0	11	0	46	0	1	0	47	4	2	61	0	0	67	304
8:15 AM	0	0	0	0	0	0	0	70	59	2	0	131	3	0	1	1	0	5	1	37	0	0	0	38	4	1	67	0	0	72	246
Total Volume	0	0	0	0	0	0	0	325	259	11	0	595	18	0	11	33	0	62	8	143	0	6	0	157	29	15	294	0	0	338	1152
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	54.6	43.5	1.8	0.0		29.0	0.0	17.7	53.2	0.0		5.1	91.1	0.0	3.8	0.0		8.6	4.4	87.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.732	0.852	0.550	0.000	0.831	0.643	0.000	0.458	0.306	0.000	0.388	0.333	0.777	0.000	0.500	0.000	0.835	0.483	0.536	0.782	0.000	0.000	0.728	0.845
Entering Leg	0	0	0	0	0	0	0	325	259	11	0	595	18	0	11	33	0	62	8	143	0	6	0	157	29	15	294	0	0	338	1152
Exiting Leg						0						455						34											342	1152	
Total						0						1050					96												680	2304	



PDI File #: **207450 A**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class: **Heavy Vehicle**

PRECISION  
DATA  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

### Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	13	0	0	0	13	0	0	0	1	0	1	0	1	0	0	0	1	0	0	8	0	0	8	23
7:15 AM	0	0	0	0	0	0	0	7	3	0	0	10	0	0	1	0	0	1	1	1	0	0	1	0	2	0	0	8	0	8	21
7:30 AM	0	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	12	0	12	21
7:45 AM	0	0	0	0	0	0	0	7	1	0	0	8	0	0	0	2	0	2	0	1	0	0	0	1	1	1	0	9	0	10	21
Total	0	0	0	0	0	0	0	35	4	0	0	39	0	0	1	3	0	4	1	3	0	1	0	5	1	0	37	0	0	38	86
8:00 AM	0	0	0	0	0	0	0	6	1	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	12
8:15 AM	0	0	0	0	0	0	0	3	4	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11	18
8:30 AM	0	0	0	0	0	0	0	6	2	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	12
8:45 AM	0	0	0	0	0	0	0	7	2	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	7	16
Total	0	0	0	0	0	0	0	22	9	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	1	26	0	0	27	58
Grand Total	0	0	0	0	0	0	0	57	13	0	0	70	0	0	1	3	0	4	1	3	0	1	0	5	1	1	63	0	0	65	144
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.4	18.6	0.0	0.0	0.0	0.0	0.0	25.0	75.0	0.0	0.0	20.0	60.0	0.0	20.0	0.0	0.0	1.5	1.5	96.9	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.6	9.0	0.0	0.0	48.6	0.0	0.0	0.7	2.1	0.0	2.8	0.7	2.1	0.0	0.7	0.0	3.5	0.7	0.7	43.8	0.0	0.0	45.1	
Exiting Leg Total	0						66						2						17						59						144
Buses	0	0	0	0	0	0	0	24	0	0	0	24	0	0	0	3	0	3	0	0	0	0	0	0	1	0	20	0	0	21	48
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.1	0.0	0.0	0.0	34.3	0.0	0.0	0.0	100.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	31.7	0.0	0.0	32.3	33.3
Exiting Leg Total	0						20						0						4						24						48
Single-Unit Trucks	0	0	0	0	0	0	0	30	12	0	0	42	0	0	1	0	0	1	1	3	0	1	0	5	0	1	35	0	0	36	84
% Single-Unit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.6	92.3	0.0	0.0	60.0	0.0	0.0	100.0	0.0	0.0	25.0	100.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	55.6	0.0	0.0	55.4	58.3
Exiting Leg Total	0						38						2						12						32						84
Articulated Trucks	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	12
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	7.7	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	0.0	0.0	12.3	8.3
Exiting Leg Total	0						8						0						1						3						12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	13	0	0	0	13	0	0	0	1	0	1	0	1	0	0	0	1	0	0	8	0	0	8	23
7:15 AM	0	0	0	0	0	0	0	7	3	0	0	10	0	0	1	0	0	1	1	0	0	1	0	2	0	0	8	0	8	21	
7:30 AM	0	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0	1	0	0	0	1	0	0	12	0	0	12	21
7:45 AM	0	0	0	0	0	0	0	7	1	0	0	8	0	0	0	2	0	2	0	1	0	0	0	1	1	0	9	0	0	10	21
Total Volume	0	0	0	0	0	0	0	35	4	0	0	39	0	0	1	3	0	4	1	3	0	1	0	5	1	0	37	0	0	38	86
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	89.7	10.3	0.0	0.0		0.0	0.0	25.0	75.0	0.0		20.0	60.0	0.0	20.0	0.0		2.6	0.0	97.4	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.673	0.333	0.000	0.000	0.750	0.000	0.000	0.250	0.375	0.000	0.500	0.250	0.750	0.000	0.250	0.000	0.625	0.250	0.000	0.771	0.000	0.000	0.792	0.935
Buses	0	0	0	0	0	0	0	15	0	0	0	15	0	0	0	3	0	3	0	0	0	0	0	0	1	0	9	0	0	10	28
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9	0.0	0.0	0.0	38.5	0.0	0.0	0.0	100.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	24.3	0.0	0.0	26.3	32.6
Single-Unit Trucks	0	0	0	0	0	0	0	19	3	0	0	22	0	0	1	0	0	1	1	3	0	1	0	5	0	0	22	0	0	22	50
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	75.0	0.0	0.0	56.4	0.0	0.0	100.0	0.0	0.0	25.0	100.0	100.0	0.0	100.0	0.0	100.0	0.0	0.0	59.5	0.0	0.0	57.9	58.1
Articulated Trucks	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	8
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	25.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0	15.8	9.3
Buses	0	0	0	0	0	0	0	15	0	0	0	15	0	0	0	3	0	3	0	0	0	0	0	0	1	0	9	0	0	10	28
Single-Unit Trucks	0	0	0	0	0	0	0	19	3	0	0	22	0	0	1	0	0	1	1	3	0	1	0	5	0	0	22	0	0	22	50
Articulated Trucks	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	8
Total Entering Leg	0	0	0	0	0	0	0	35	4	0	0	39	0	0	1	3	0	4	1	3	0	1	0	5	1	0	37	0	0	38	86
Buses							0					9						0						4						15	28
Single-Unit Trucks							0					25						1						3						21	50
Articulated Trucks							0					6						0						1						1	8
Total Exiting Leg							0					40						1						8						37	86

PDI File #: **207450 A**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 D A T A  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

# Buses

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total	
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4	0	0	4	10
7:15 AM	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	6
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
7:45 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	2	0	2	0	0	0	0	0	0	0	1	0	3	0	0	4	9
Total	0	0	0	0	0	0	0	15	0	0	0	15	0	0	0	3	0	3	0	0	0	0	0	0	0	1	0	9	0	0	10	28
8:00 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	7	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4	
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4	
8:45 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	5	
Total	0	0	0	0	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11	20
Grand Total	0	0	0	0	0	0	0	24	0	0	0	24	0	0	0	3	0	3	0	0	0	0	0	0	0	1	0	20	0	0	21	48
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	95.2	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	6.3	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	41.7	0.0	0.0	43.8		
Exiting Leg Total	0						20						0						4						24						48	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue							
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		Total
7:00 AM	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4	0	0	4	10
7:15 AM	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	6	
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
7:45 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	2	0	2	0	0	0	0	0	0	0	1	0	3	0	0	4	9
Total Volume	0	0	0	0	0	0	0	15	0	0	0	15	0	0	0	3	0	3	0	0	0	0	0	0	0	1	0	9	0	0	10	28
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	90.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.375	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.563	0.000	0.000	0.625	0.700	
Entering Leg	0	0	0	0	0	0	0	15	0	0	0	15	0	0	0	3	0	3	0	0	0	0	0	0	1	0	9	0	0	10	28	
Exiting Leg						0						9																		15	28	
Total						0						24				3								4						25	56	

PDI File #: **207450 A**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

Class:		Single-Unit Trucks																														
		Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total
		from North						from East						from South						from Southwest						from West						
		Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3	0	0	3	12	
7:15 AM	0	0	0	0	0	0	0	3	2	0	0	5	0	0	1	0	0	1	1	0	0	1	0	2	0	0	3	0	0	3	11	
7:30 AM	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	1	0	0	11	0	0	11	17	
7:45 AM	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	0	0	5	0	0	5	10	
Total	0	0	0	0	0	0	0	19	3	0	0	22	0	0	1	0	0	1	1	3	0	1	0	5	0	0	22	0	0	22	50	
8:00 AM	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5	
8:15 AM	0	0	0	0	0	0	0	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	12	
8:30 AM	0	0	0	0	0	0	0	3	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	8	
8:45 AM	0	0	0	0	0	0	0	3	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	9	
Total	0	0	0	0	0	0	0	11	9	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13	0	0	14	34	
Grand Total	0	0	0	0	0	0	0	30	12	0	0	42	0	0	1	0	0	1	1	3	0	1	0	5	0	1	35	0	0	36	84	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	71.4	28.6	0.0	0.0		0.0	0.0	100.0	0.0	0.0		20.0	60.0	0.0	20.0	0.0		0.0	2.8	97.2	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7	14.3	0.0	0.0	50.0	0.0	0.0	1.2	0.0	0.0	1.2	1.2	3.6	0.0	1.2	0.0	6.0	0.0	1.2	41.7	0.0	0.0	42.9	
Exiting Leg Total	0						38						2						12						32						84	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue							
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Total	
7:00 AM	0	0	0	0	0	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	1	0	0	1	0	0	3	0	0	3	12	
7:15 AM	0	0	0	0	0	0	0	3	2	0	0	0	5	0	0	1	0	0	1	1	0	0	1	0	2	0	0	3	0	3	11	
7:30 AM	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	1	0	0	1	0	0	11	0	0	11	17	
7:45 AM	0	0	0	0	0	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	1	0	0	1	0	0	5	0	0	5	10	
Total Volume	0	0	0	0	0	0	0	19	3	0	0	0	22	0	0	1	0	0	1	1	3	0	1	0	5	0	0	22	0	0	22	50
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.4	13.6	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		20.0	60.0	0.0	20.0	0.0		0.0	0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.594	0.375	0.000	0.000	0.688	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.750	0.000	0.250	0.000	0.625	0.000	0.000	0.500	0.000	0.000	0.500	0.735	
Entering Leg	0	0	0	0	0	0	0	19	3	0	0	0	22	0	0	1	0	0	1	1	3	0	1	0	5	0	0	22	0	0	22	50
Exiting Leg							0					25												3			21			50		
Total							0					47							2					8					43		100	



PDI File #: **207450 A**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

Class:		Articulated Trucks																														
		Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						
		from North						from East						from South						from Southwest						from West						
		Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4
Grand Total	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	12
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	8.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	66.7	
Exiting Leg Total	0						8						0						1						3						12	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue							
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total Volume	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	8
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.500	
Entering Leg	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	8
Exiting Leg	0						6						0						1						1						8	
Total	0						8						0						1						7						16	

PDI File #: **207450 A**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
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 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total	
	from North								from East								from South								from Southwest								from West									
	Right	Bear Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-EB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NWB	CW-SEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	4	
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	6	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	2	0	0	0	2	4
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	4	0	0	0	0	0	0	0	4	0	0	2	0	0	0	2	8
Grand Total	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	1	0	0	0	0	1	0	2	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	4	14
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	28.6	7.1	0.0	0.0	0.0	0.0	7.1	0.0	14.3	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	28.6	0.0	0.0	28.6	0.0	0.0	0.0	0.0	28.6	
Exiting Leg Total	0								9								1								0								4								14	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total		
	from North								from East								from South								from Southwest								from West										
	Right	Bear Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-EB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NWB	CW-SEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total			
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0	0	2	
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	4	0	0	0	0	0	0	4	0	0	2	0	0	0	0	2	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.500		
Entering Leg	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	4	0	0	0	0	0	0	4	0	0	2	0	0	0	0	2		
Exiting Leg	0								7								0								0								1								8		
Total	0								8								1								4								3								16		

PDI File #: 207450 A  
Location: N: Driveway S: Appleton Place  
Location: E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD  
Count Date: Tuesday, February 4, 2020  
Start Time: 7:00 AM  
End Time: 9:00 AM  
Class:

PRECISION  
DATA  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Pedestrians

	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total
	from North								from East								from South								from Southwest								from West								
	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-EB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NWB	CW-SEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	10	1	11	0	0	0	0	0	12	0	12	0	0	0	0	0	14	0	14	0	0	0	0	0	5	0	5	0	0	0	0	0	0	1	1	43
7:15 AM	0	0	0	0	0	6	1	7	0	0	0	0	0	23	0	23	0	0	0	0	0	15	0	15	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	47
7:30 AM	0	0	0	0	0	57	0	57	0	0	0	0	0	56	0	56	0	0	0	0	0	47	2	49	0	0	0	0	0	2	7	9	0	0	0	0	0	0	8	8	179
7:45 AM	0	0	0	0	0	22	0	22	0	0	0	0	0	25	2	27	0	0	0	0	0	12	1	13	0	0	0	0	0	1	2	3	0	0	0	0	0	0	1	1	66
Total	0	0	0	0	0	95	2	97	0	0	0	0	0	116	2	118	0	0	0	0	0	88	3	91	0	0	0	0	0	8	10	18	0	0	0	0	0	0	11	11	335
8:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	15
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:30 AM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2	0	2	0	0	0	0	2	0	2	8	
8:45 AM	0	0	0	0	0	1	2	3	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2	2	9	
Total	0	0	0	0	0	5	4	9	0	0	0	0	0	5	3	8	0	0	0	0	0	4	3	7	0	0	0	0	0	5	1	6	0	0	0	0	0	2	2	4	34
Grand Total	0	0	0	0	0	100	6	106	0	0	0	0	0	121	5	126	0	0	0	0	0	92	6	98	0	0	0	0	0	13	11	24	0	0	0	0	0	2	13	15	369
Approach %	0	0	0	0	0	94.3	5.66		0	0	0	0	0	96	3.97		0	0	0	0	0	93.9	6.12		0	0	0	0	0	54.2	45.8		0	0	0	0	0	13.3	86.7		
Total %	0	0	0	0	0	27.1	1.63	28.7	0	0	0	0	0	32.8	1.36	34.1	0	0	0	0	0	24.9	1.63	26.6	0	0	0	0	0	3.52	2.98	6.5	0	0	0	0	0	0.54	3.52	4.07	
Exiting Leg Total	106								126								98								24								15								369

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total	
	from North								from East								from South								from Southwest								from West									
	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-FB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NWB	CW-SFB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	10	1	11	0	0	0	0	0	12	0	12	0	0	0	0	0	14	0	14	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	1	1	43
7:15 AM	0	0	0	0	0	6	1	7	0	0	0	0	0	23	0	23	0	0	0	0	0	15	0	15	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	47
7:30 AM	0	0	0	0	0	57	0	57	0	0	0	0	0	56	0	56	0	0	0	0	0	47	2	49	0	0	0	0	0	2	7	9	0	0	0	0	0	0	0	8	8	179
7:45 AM	0	0	0	0	0	22	0	22	0	0	0	0	0	25	2	27	0	0	0	0	0	12	1	13	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	1	1	66
Total Volume	0	0	0	0	0	95	2	97	0	0	0	0	0	116	2	118	0	0	0	0	0	88	3	91	0	0	0	0	0	8	10	18	0	0	0	0	0	0	0	11	11	335
% Approach Total	0.0	0.0	0.0	0.0	0.0	97.9	2.1		0.0	0.0	0.0	0.0	0.0	98.3	1.7		0.0	0.0	0.0	0.0	0.0	96.7	3.3		0.0	0.0	0.0	0.0	0.0	44.4	55.6		0.0	0.0	0.0	0.0	0.0	0.0	100.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.417	0.500	0.425	0.000	0.000	0.000	0.000	0.000	0.518	0.250	0.527	0.000	0.000	0.000	0.000	0.000	0.468	0.375	0.464	0.000	0.000	0.000	0.000	0.000	0.400	0.357	0.500	0.000	0.000	0.000	0.000	0.000	0.344	0.344	0.468		
Entering Leg	0	0	0	0	0	95	2	97	0	0	0	0	0	116	2	118	0	0	0	0	0	88	3	91	0	0	0	0	0	8	10	18	0	0	0	0	0	0	0	11	11	335
Exiting Leg	97								118								91								18								11								335	
Total	194								236								182								36								22								670	



PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Cars and Heavy Vehicles (Combined)

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	0	0	0	0	1	1	84	39	0	0	124	2	0	2	2	0	6	1	46	0	3	0	50	1	2	99	1	0	103	284
4:15 PM	1	0	0	0	0	1	0	71	30	0	0	101	0	0	1	1	0	2	0	51	0	4	0	55	2	5	101	0	0	108	267
4:30 PM	1	1	0	0	0	2	0	84	27	2	0	113	0	0	1	0	0	1	2	57	0	3	0	62	1	5	92	2	0	100	278
4:45 PM	0	0	0	0	0	0	1	85	47	1	0	134	2	0	2	2	0	6	1	49	1	3	0	54	3	2	108	0	0	113	307
Total	3	1	0	0	0	4	2	324	143	3	0	472	4	0	6	5	0	15	4	203	1	13	0	221	7	14	400	3	0	424	1136
5:00 PM	1	0	0	0	0	1	1	77	39	1	0	118	2	0	2	0	0	4	1	74	0	1	0	76	3	0	89	0	0	92	291
5:15 PM	0	1	0	0	0	1	0	66	20	0	0	86	5	1	0	1	0	7	2	86	0	2	0	90	1	3	109	1	0	114	298
5:30 PM	1	0	0	1	0	2	0	78	20	0	0	98	4	0	4	2	0	10	1	87	0	4	0	92	1	5	108	2	0	116	318
5:45 PM	1	0	0	0	0	1	1	88	31	0	0	120	3	0	2	0	0	5	1	70	0	3	0	74	4	1	105	0	0	110	310
Total	3	1	0	1	0	5	2	309	110	1	0	422	14	1	8	3	0	26	5	317	0	10	0	332	9	9	411	3	0	432	1217
Grand Total	6	2	0	1	0	9	4	633	253	4	0	894	18	1	14	8	0	41	9	520	1	23	0	553	16	23	811	6	0	856	2353
Approach %	66.7	22.2	0.0	11.1	0.0		0.4	70.8	28.3	0.4	0.0		43.9	2.4	34.1	19.5	0.0		1.6	94.0	0.2	4.2	0.0		1.9	2.7	94.7	0.7	0.0		
Total %	0.3	0.1	0.0	0.0	0.0	0.4	0.2	26.9	10.8	0.2	0.0	38.0	0.8	0.0	0.6	0.3	0.0	1.7	0.4	22.1	0.0	1.0	0.0	23.5	0.7	1.0	34.5	0.3	0.0	36.4	
Exiting Leg Total	12						1350						36						279						676						2353
Cars	6	2	0	1	0	9	4	616	251	4	0	875	18	1	14	8	0	41	9	512	1	23	0	545	16	23	791	6	0	836	2306
% Cars	100.0	100.0	0.0	100.0	0.0	100.0	100.0	97.3	99.2	100.0	0.0	97.9	100.0	100.0	100.0	0.0	100.0		100.0	98.5	100.0	100.0	0.0	98.6	100.0	100.0	97.5	100.0	0.0	97.7	98.0
Exiting Leg Total	12						1322						36						277						659						2306
Heavy Vehicles	0	0	0	0	0	0	0	17	2	0	0	19	0	0	0	0	0	0	0	8	0	0	0	8	0	0	20	0	0	20	47
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.8	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.4	0.0	0.0	2.5	0.0	0.0	2.3	2.0
Exiting Leg Total	0						28						0						2						17						47

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
5:00 PM	1	0	0	0	0	1	1	77	39	1	0	118	2	0	2	0	0	4	1	74	0	1	0	76	3	0	89	0	0	92	291
5:15 PM	0	1	0	0	0	1	0	66	20	0	0	86	5	1	0	1	0	7	2	86	0	2	0	90	1	3	109	1	0	114	298
5:30 PM	1	0	0	1	0	2	0	78	20	0	0	98	4	0	4	2	0	10	1	87	0	4	0	92	1	5	108	2	0	116	318
5:45 PM	1	0	0	0	0	1	1	88	31	0	0	120	3	0	2	0	0	5	1	70	0	3	0	74	4	1	105	0	0	110	310
Total Volume	3	1	0	1	0	5	2	309	110	1	0	422	14	1	8	3	0	26	5	317	0	10	0	332	9	9	411	3	0	432	1217
% Approach Total	60.0	20.0	0.0	20.0	0.0		0.5	73.2	26.1	0.2	0.0		53.8	3.8	30.8	11.5	0.0		1.5	95.5	0.0	3.0	0.0		2.1	2.1	95.1	0.7	0.0		
PHF	0.750	0.250	0.000	0.250	0.000	0.625	0.500	0.878	0.705	0.250	0.000	0.879	0.700	0.250	0.500	0.375	0.000	0.650	0.625	0.911	0.000	0.625	0.000	0.902	0.563	0.450	0.943	0.375	0.000	0.931	0.957
Cars	3	1	0	1	0	5	2	301	109	1	0	413	14	1	8	3	0	26	5	315	0	10	0	330	9	9	401	3	0	422	1196
Cars %	100.0	100.0	0.0	100.0	0.0	100.0	100.0	97.4	99.1	100.0	0.0	97.9	100.0	100.0	100.0	0.0	100.0		100.0	99.4	0.0	100.0	0.0	99.4	100.0	100.0	97.6	100.0	0.0	97.7	98.3
Heavy Vehicles	0	0	0	0	0	0	0	8	1	0	0	9	0	0	0	0	0	0	0	2	0	0	0	2	0	0	10	0	0	10	21
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.9	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0	2.4	0.0	0.0	2.3	1.7
Cars Enter Leg	3	1	0	1	0	5	2	301	109	1	0	413	14	1	8	3	0	26	5	315	0	10	0	330	9	9	401	3	0	422	1196
Heavy Enter Leg	0	0	0	0	0	0	0	8	1	0	0	9	0	0	0	0	0	0	0	2	0	0	0	2	0	0	10	0	0	10	21
Total Entering Leg	3	1	0	1	0	5	2	309	110	1	0	422	14	1	8	3	0	26	5	317	0	10	0	332	9	9	411	3	0	432	1217
Cars Exiting Leg	6						731						15						122						322						1196
Heavy Exiting Leg	0						12						0						1						8						21
Total Exiting Leg	6						743						15						123						330						1217

PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars**

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	0	0	0	0	1	1	82	38	0	0	121	2	0	2	2	0	6	1	44	0	3	0	48	1	2	96	1	0	100	276
4:15 PM	1	0	0	0	0	1	0	69	30	0	0	99	0	0	1	1	0	2	0	50	0	4	0	54	2	5	98	0	0	105	261
4:30 PM	1	1	0	0	0	2	0	81	27	2	0	110	0	0	1	0	0	1	2	56	0	3	0	61	1	5	91	2	0	99	273
4:45 PM	0	0	0	0	0	0	1	83	47	1	0	132	2	0	2	2	0	6	1	47	1	3	0	52	3	2	105	0	0	110	300
Total	3	1	0	0	0	4	2	315	142	3	0	462	4	0	6	5	0	15	4	197	1	13	0	215	7	14	390	3	0	414	1110
5:00 PM	1	0	0	0	0	1	1	72	38	1	0	112	2	0	2	0	0	4	1	74	0	1	0	76	3	0	86	0	0	89	282
5:15 PM	0	1	0	0	0	1	0	66	20	0	0	86	5	1	0	1	0	7	2	86	0	2	0	90	1	3	106	1	0	111	295
5:30 PM	1	0	0	1	0	2	0	77	20	0	0	97	4	0	4	2	0	10	1	86	0	4	0	91	1	5	105	2	0	113	313
5:45 PM	1	0	0	0	0	1	1	86	31	0	0	118	3	0	2	0	0	5	1	69	0	3	0	73	4	1	104	0	0	109	306
Total	3	1	0	1	0	5	2	301	109	1	0	413	14	1	8	3	0	26	5	315	0	10	0	330	9	9	401	3	0	422	1196
Grand Total	6	2	0	1	0	9	4	616	251	4	0	875	18	1	14	8	0	41	9	512	1	23	0	545	16	23	791	6	0	836	2306
Approach %	66.7	22.2	0.0	11.1	0.0		0.5	70.4	28.7	0.5	0.0		43.9	2.4	34.1	19.5	0.0		1.7	93.9	0.2	4.2	0.0		1.9	2.8	94.6	0.7	0.0		
Total %	0.3	0.1	0.0	0.0	0.0	0.4	0.2	26.7	10.9	0.2	0.0	37.9	0.8	0.0	0.6	0.3	0.0	1.8	0.4	22.2	0.0	1.0	0.0	23.6	0.7	1.0	34.3	0.3	0.0	36.3	
Exiting Leg Total	12						1322						36						277						659						2306

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total	
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		
5:00 PM	1	0	0	0	0	1	1	72	38	1	0	112	2	0	2	0	0	4	1	74	0	1	0	76	3	0	86	0	0	89	282	
5:15 PM	0	1	0	0	0	1	0	66	20	0	0	86	5	1	0	0	1	0	7	2	86	0	2	0	90	1	3	106	1	0	111	295
5:30 PM	1	0	0	1	0	2	0	77	20	0	0	97	4	0	4	2	0	10	1	86	0	4	0	91	1	5	105	2	0	113	313	
5:45 PM	1	0	0	0	0	1	1	86	31	0	0	118	3	0	2	0	0	5	1	69	0	3	0	73	4	1	104	0	0	109	306	
Total Volume	3	1	0	1	0	5	2	301	109	1	0	413	14	1	8	3	0	26	5	315	0	10	0	330	9	9	401	3	0	422	1196	
% Approach Total	60.0	20.0	0.0	20.0	0.0		0.5	72.9	26.4	0.2	0.0		53.8	3.8	30.8	11.5	0.0		1.5	95.5	0.0	3.0	0.0		2.1	2.1	95.0	0.7	0.0			
PHF	0.750	0.250	0.000	0.250	0.000	0.625	0.500	0.875	0.717	0.250	0.000	0.875	0.700	0.250	0.500	0.375	0.000	0.650	0.625	0.916	0.000	0.625	0.000	0.907	0.563	0.450	0.946	0.375	0.000	0.934	0.955	
Entering Leg	3	1	0	1	0	5	2	301	109	1	0	413	14	1	8	3	0	26	5	315	0	10	0	330	9	9	401	3	0	422	1196	
Exiting Leg						6						731						15						122						322	1196	
Total						11						1144						41						452						744	2392	

PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total	
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	3	0	0	3	8
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3	0	0	3	6	
4:30 PM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	5	
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	3	0	0	3	7	
Total	0	0	0	0	0	0	0	9	1	0	0	10	0	0	0	0	0	0	0	6	0	0	0	6	0	0	10	0	0	10	26	
5:00 PM	0	0	0	0	0	0	0	5	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	9	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3	
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3	0	0	3	5	
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	4	
Total	0	0	0	0	0	0	0	8	1	0	0	9	0	0	0	0	0	0	0	2	0	0	0	2	0	0	10	0	0	10	21	
Grand Total	0	0	0	0	0	0	0	17	2	0	0	19	0	0	0	0	0	0	0	8	0	0	0	8	0	0	20	0	0	20	47	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2	4.3	0.0	0.0	40.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	17.0	0.0	0.0	42.6	0.0	0.0	42.6		
Exiting Leg Total	0						28						0						2						17						47	
Buses	0	0	0	0	0	0	0	13	1	0	0	14	0	0	0	0	0	0	0	2	0	0	0	2	0	0	17	0	0	17	33	
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.5	50.0	0.0	0.0	73.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0	85.0	0.0	0.0	85.0	70.2	
Exiting Leg Total	0						19						0						1						13						33	
Single-Unit Trucks	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	5	0	0	0	5	0	0	2	0	0	2	10	
% Single-Unit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5	0.0	0.0	0.0	62.5	0.0	0.0	10.0	0.0	0.0	10.0	21.3	
Exiting Leg Total	0						7						0						0						3						10	
Articulated Trucks	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	4	
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	50.0	0.0	0.0	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	12.5	0.0	0.0	5.0	0.0	0.0	5.0	8.5	
Exiting Leg Total	0						2						0						1						1						4	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue							
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		Total
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3	0	0	3	6
4:30 PM	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	1	5
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	3	0	0	3	7
5:00 PM	0	0	0	0	0	0	0	5	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	9	
Total Volume	0	0	0	0	0	0	0	12	1	0	0	13	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	10	0	0	10	27
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.3	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.250	0.000	0.000	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.833	0.000	0.000	0.833	0.750	
Buses	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	18	
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.3	0.0	0.0	0.0	76.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0	80.0	66.7	
Single-Unit Trucks	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	0	0	2	0	0	2	6	
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	0.0	75.0	0.0	0.0	20.0	0.0	0.0	20.0	22.2	
Articulated Trucks	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	100.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	
Buses	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	18	
Single-Unit Trucks	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	0	0	2	0	0	2	6	
Articulated Trucks	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	
Total Entering Leg	0	0	0	0	0	0	0	12	1	0	0	13	0	0	0	0	0	0	0	4	0	0	0	4	0	0	10	0	0	10	27	
Buses	0						8						0						0						10						18	
Single-Unit Trucks	0						5						0						0						1						6	
Articulated Trucks	0						1						0						1						1						3	
Total Exiting Leg	0						14						0						1						12						27	

PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Buses

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total	
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	5
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	5	
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4	
Total	0	0	0	0	0	0	0	7	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	17	
5:00 PM	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	6	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3	
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	2	4
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	1	3
Total	0	0	0	0	0	0	0	6	0	0	0	6	0	0	0	0	0	0	0	2	0	0	0	2	0	0	8	0	0	8	16	
Grand Total	0	0	0	0	0	0	0	13	1	0	0	14	0	0	0	0	0	0	0	2	0	0	0	2	0	0	17	0	0	17	33	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.9	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.4	3.0	0.0	0.0	42.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	6.1	0.0	0.0	51.5	0.0	0.0	51.5		
Exiting Leg Total	0						19						0						1						13						33	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	5
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4
5:00 PM	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	6
Total Volume	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	18
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.667	0.000	0.000	0.667	0.750	
Entering Leg	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	18
Exiting Leg	0						8						0						0						10						18
Total	0						18						0						0						18						36



PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 D A T A  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

# Single-Unit Trucks

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total	
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	1	0	0	1	3
Total	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	1	0	0	1	8
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Grand Total	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	2	0	0	2	10
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	20.0	0.0	0.0	20.0		
Exiting Leg Total	0						7						0						0						3						10	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	1	0	0	1	3
Total Volume	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	5	0	0	0	0	5	0	0	1	0	0	1	8
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000		0.000	0.625	0.000	0.000	0.000	0.625	0.000	0.000	0.250	0.000	0.000	0.250	0.667
Entering Leg	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	5	0	0	0	5	0	0	1	0	0	1	8
Exiting Leg	0						6						0						0						2						8
Total	0						8						0						5						3						16

PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Articulated Trucks

	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total	
	from North						from East						from South						from Southwest						from West							
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
Grand Total	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	4
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	
Exiting Leg Total	0						2						0						1						1						4	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Driveway						Massachusetts Avenue						Appleton Place						Appleton Street						Massachusetts Avenue						Total
	from North						from East						from South						from Southwest						from West						
	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total Volume	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	
Entering Leg	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	
Exiting Leg	0						1						0						1						1						
Total	0						3						0						2						1						

PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total
	from North								from East								from South								from Southwest								from West								
	Right	Bear Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-EB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NWB	CW-SEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	
5:00 PM	0	0	0	0	0	0	1	1	2	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	1	1	2	0	4	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Grand Total	0	0	0	0	0	0	1	1	2	0	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	
Approach %	0.0	0.0	0.0	0.0	0.0	50.0	50.0			0.0	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	11.1	11.1	22.2	0.0	0.0	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	22.2		
Exiting Leg Total	2								2								0								0								5								9

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total
	from North								from East								from South								from Southwest								from West								
	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-EB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NWB	CW-SEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
5:00 PM	0	0	0	0	0	1	1	2	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Total Volume	0	0	0	0	0	1	1	2	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	6		
% Approach Total	0.0	0.0	0.0	0.0	0.0	50.0	50.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.500			
Entering Leg	0	0	0	0	0	1	1	2	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	6		
Exiting Leg	2								2								0								0								2								6
Total	4								4								0								0								4								12

PDI File #: **207450 AA**  
 Location: **N: Driveway S: Appleton Place**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue SW: Appleton Street**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
DATA  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

## Pedestrians

	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total	
	from North								from East								from South								from Southwest								from West									
	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-EB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NWB	CW-SWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2	3	0	0	0	0	0	4	2	6	0	0	0	0	0	0	0	0	0	17
4:15 PM	0	0	0	0	0	3	2	5	0	0	0	0	0	4	1	5	0	0	0	0	0	2	1	3	0	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	14	
4:30 PM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5			
4:45 PM	0	0	0	0	0	6	2	8	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	12		
Total	0	0	0	0	0	12	8	20	0	0	0	0	0	6	1	7	0	0	0	0	0	6	3	9	0	0	0	0	0	8	3	11	0	0	0	0	0	0	1	1	48	
5:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7		
5:15 PM	0	0	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0	1	1	10		
5:30 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2	3	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	10		
5:45 PM	0	0	0	0	0	0	3	3	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5			
Total	0	0	0	0	0	9	7	16	0	0	0	0	0	4	3	7	0	0	0	0	0	2	2	4	0	0	0	0	0	2	2	4	0	0	0	0	0	1	1	32		
Grand Total	0	0	0	0	0	21	15	36	0	0	0	0	0	10	4	14	0	0	0	0	0	8	5	13	0	0	0	0	0	10	5	15	0	0	0	0	0	2	2	80		
Approach %	0	0	0	0	0	58.3	41.7		0	0	0	0	0	71.4	28.6		0	0	0	0	0	61.5	38.5		0	0	0	0	0	66.7	33.3		0	0	0	0	0	0	100			
Total %	0	0	0	0	0	26.3	18.8	45	0	0	0	0	0	12.5	5	17.5	0	0	0	0	0	10	6.25	16.3		0	0	0	0	0	12.5	6.25	18.8		0	0	0	0	0	2.5	2.5	
Exiting Leg Total	36								14								13								15																2	80

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Driveway								Massachusetts Avenue								Appleton Place								Appleton Street								Massachusetts Avenue								Total	
	from North								from East								from South								from Southwest								from West									
	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-WB	CW-EB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-WNB	CW-SWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2	3	0	0	0	0	0	4	2	6	0	0	0	0	0	0	0	0	0	14
4:15 PM	0	0	0	0	0	3	2	5	0	0	0	0	0	4	1	5	0	0	0	0	0	2	1	3	0	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	17	
4:30 PM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5		
4:45 PM	0	0	0	0	0	0	6	2	8	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	12	
Total Volume	0	0	0	0	0	12	8	20	0	0	0	0	0	6	1	7	0	0	0	0	0	6	3	9	0	0	0	0	0	8	3	11	0	0	0	0	0	0	1	1	48	
% Approach Total	0.0	0.0	0.0	0.0	0.0	60.0	40.0		0.0	0.0	0.0	0.0	0.0	85.7	14.3		0.0	0.0	0.0	0.0	0.0	66.7	33.3		0.0	0.0	0.0	0.0	0.0	72.7	27.3		0.0	0.0	0.0	0.0	0.0	0.0	100.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.500	0.667	0.625	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.350	0.000	0.000	0.000	0.000	0.000	0.750	0.375	0.750	0.000	0.000	0.000	0.000	0.000	0.500	0.375	0.458	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.706	
Entering Leg	0	0	0	0	0	12	8	20	0	0	0	0	0	6	1	7	0	0	0	0	0	6	3	9	0	0	0	0	0	8	3	11	0	0	0	0	0	0	1	1	48	
Exiting Leg								20								7							9		9							11						1	1	48		
Total								40								14							18									22						2	2	96		



PDI File #: 207450 BBCC  
Location: N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway  
Location: E: Massachusetts Avenue W: Massachusetts Avenue  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD  
Count Date: Tuesday, February 4, 2020  
Start Time: 4:00 PM  
End Time: 6:00 PM  
Class:

PRECISION  
DATA  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Cars and Heavy Vehicles (Combined)

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	26	1	5	0	0	32	1	3	0	0	0	4	1	22	95	2	0	120	1	0	0	0	0	1	0	122	1	23	0	146	303
4:15 PM	16	2	6	0	0	24	1	1	0	1	0	3	0	16	82	0	0	98	2	0	1	0	0	3	1	113	0	43	0	157	285
4:30 PM	18	0	15	0	0	33	2	5	0	0	0	7	2	13	96	0	0	111	0	0	0	0	0	0	1	115	1	34	0	151	302
4:45 PM	27	0	6	0	0	33	1	4	0	3	0	8	1	18	94	0	0	113	0	0	0	0	0	0	0	132	1	21	0	154	308
Total	87	3	32	0	0	122	5	13	0	4	0	22	4	69	367	2	0	442	3	0	1	0	0	4	2	482	3	121	0	608	1198
5:00 PM	18	0	11	0	0	29	3	4	0	2	0	9	1	24	96	0	0	121	0	0	1	0	0	1	0	116	3	50	0	169	329
5:15 PM	15	1	8	0	0	24	0	1	0	1	0	2	1	23	72	0	0	96	2	0	0	1	0	3	1	139	1	55	0	196	321
5:30 PM	13	0	8	0	0	21	0	4	0	3	0	7	0	17	82	0	0	99	2	0	1	0	0	3	1	148	1	49	1	200	330
5:45 PM	19	3	11	0	0	33	2	3	0	0	0	5	0	20	102	3	0	125	4	0	1	0	0	5	0	137	1	40	0	178	346
Total	65	4	38	0	0	107	5	12	0	6	0	23	2	84	352	3	0	441	8	0	3	1	0	12	2	540	6	194	1	743	1326
Grand Total	152	7	70	0	0	229	10	25	0	10	0	45	6	153	719	5	0	883	11	0	4	1	0	16	4	1022	9	315	1	1351	2524
Approach %	66.4	3.1	30.6	0.0	0.0		22.2	55.6	0.0	22.2	0.0		0.7	17.3	81.4	0.6	0.0		68.8	0.0	25.0	6.3	0.0		0.3	75.6	0.7	23.3	0.1		
Total %	6.0	0.3	2.8	0.0	0.0	9.1	0.4	1.0	0.0	0.4	0.0	1.8	0.2	6.1	28.5	0.2	0.0	35.0	0.4	0.0	0.2	0.0	0.0	0.6	0.2	40.5	0.4	12.5	0.0	53.5	
Exiting Leg Total	482						15						1113						16						898						2524
Cars	152	7	70	0	0	229	10	25	0	9	0	44	6	150	698	5	0	859	11	0	4	1	0	16	4	999	9	312	1	1325	2473
% Cars	100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	0.0	90.0	0.0	97.8	100.0	98.0	97.1	100.0	0.0	97.3	100.0	0.0	100.0	100.0	0.0	100.0	100.0	97.7	100.0	99.0	100.0	98.1	98.0
Exiting Leg Total	476						15						1089						16						877						2473
Heavy Vehicles	0	0	0	0	0	0	0	0	0	1	0	1	0	3	21	0	0	24	0	0	0	0	0	0	0	23	0	3	0	26	51
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	2.2	0.0	2.0	2.9	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	1.0	0.0	1.9	2.0
Exiting Leg Total	6						0						24						0						21						51

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
5:00 PM	18	0	11	0	0	29	3	4	0	2	0	9	1	24	96	0	0	121	0	0	1	0	0	1	0	116	3	50	0	169	329
5:15 PM	15	1	8	0	0	24	0	1	0	1	0	2	1	23	72	0	0	96	2	0	0	1	0	3	1	139	1	55	0	196	321
5:30 PM	13	0	8	0	0	21	0	4	0	3	0	7	0	17	82	0	0	99	2	0	1	0	0	3	1	148	1	49	1	200	330
5:45 PM	19	3	11	0	0	33	2	3	0	0	0	5	0	20	102	3	0	125	4	0	1	0	0	5	0	137	1	40	0	178	346
Total Volume	65	4	38	0	0	107	5	12	0	6	0	23	2	84	352	3	0	441	8	0	3	1	0	12	2	540	6	194	1	743	1326
% Approach Total	60.7	3.7	35.5	0.0	0.0		21.7	52.2	0.0	26.1	0.0		0.5	19.0	79.8	0.7	0.0		66.7	0.0	25.0	8.3	0.0		0.3	72.7	0.8	26.1	0.1		
PHF	0.855	0.333	0.864	0.000	0.000	0.811	0.417	0.750	0.000	0.500	0.000	0.639	0.500	0.875	0.863	0.250	0.000	0.882	0.500	0.000	0.750	0.250	0.000	0.600	0.500	0.912	0.500	0.882	0.250	0.929	0.958
Cars	65	4	38	0	0	107	5	12	0	5	0	22	2	82	340	3	0	427	8	0	3	1	0	12	2	530	6	193	1	732	1300
Cars %	100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	0.0	83.3	0.0	95.7	100.0	97.6	96.6	100.0	0.0	96.8	100.0	0.0	100.0	100.0	0.0	100.0	100.0	98.1	100.0	99.5	100.0	98.5	98.0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	1	0	1	0	2	12	0	0	14	0	0	0	0	0	0	0	10	0	1	0	11	26
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	4.3	0.0	2.4	3.4	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.5	0.0	1.5	2.0
Cars Enter Leg	65	4	38	0	0	107	5	12	0	5	0	22	2	82	340	3	0	427	8	0	3	1	0	12	2	530	6	193	1	732	1300
Heavy Enter Leg	0	0	0	0	0	0	0	0	0	1	0	1	0	2	12	0	0	14	0	0	0	0	0	0	0	10	0	1	0	11	26
Total Entering Leg	65	4	38	0	0	107	5	12	0	6	0	23	2	84	352	3	0	441	8	0	3	1	0	12	2	540	6	194	1	743	1326
Cars Exiting Leg	283						8						581						9						419						1300
Heavy Exiting Leg	3						0						11						0						12						26
Total Exiting Leg	286						8						592						9						431						1326

PDI File #: **207450 BBCC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars**

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	26	1	5	0	0	32	1	3	0	0	0	4	1	21	93	2	0	117	1	0	0	0	0	1	0	118	1	23	0	142	296
4:15 PM	16	2	6	0	0	24	1	1	0	1	0	3	0	16	80	0	0	96	2	0	1	0	0	3	1	110	0	42	0	153	279
4:30 PM	18	0	15	0	0	33	2	5	0	0	0	7	2	13	93	0	0	108	0	0	0	0	0	0	1	113	1	34	0	149	297
4:45 PM	27	0	6	0	0	33	1	4	0	3	0	8	1	18	92	0	0	111	0	0	0	0	0	0	0	128	1	20	0	149	301
Total	87	3	32	0	0	122	5	13	0	4	0	22	4	68	358	2	0	432	3	0	1	0	0	4	2	469	3	119	0	593	1173
5:00 PM	18	0	11	0	0	29	3	4	0	2	0	9	1	22	90	0	0	113	0	0	1	0	0	1	0	113	3	50	0	166	318
5:15 PM	15	1	8	0	0	24	0	1	0	1	0	2	1	23	71	0	0	95	2	0	0	1	0	3	1	136	1	55	0	193	317
5:30 PM	13	0	8	0	0	21	0	4	0	2	0	6	0	17	81	0	0	98	2	0	1	0	0	3	1	146	1	48	1	197	325
5:45 PM	19	3	11	0	0	33	2	3	0	0	0	5	0	20	98	3	0	121	4	0	1	0	0	5	0	135	1	40	0	176	340
Total	65	4	38	0	0	107	5	12	0	5	0	22	2	82	340	3	0	427	8	0	3	1	0	12	2	530	6	193	1	732	1300
Grand Total	152	7	70	0	0	229	10	25	0	9	0	44	6	150	698	5	0	859	11	0	4	1	0	16	4	999	9	312	1	1325	2473
Approach %	66.4	3.1	30.6	0.0	0.0		22.7	56.8	0.0	20.5	0.0		0.7	17.5	81.3	0.6	0.0		68.8	0.0	25.0	6.3	0.0		0.3	75.4	0.7	23.5	0.1		
Total %	6.1	0.3	2.8	0.0	0.0	9.3	0.4	1.0	0.0	0.4	0.0	1.8	0.2	6.1	28.2	0.2	0.0	34.7	0.4	0.0	0.2	0.0	0.0	0.6	0.2	40.4	0.4	12.6	0.0	53.6	
Exiting Leg Total	476						15						1089						16						877						2473

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
5:00 PM	18	0	11	0	0	29	3	4	0	2	0	9	1	22	90	0	0	113	0	0	1	0	0	1	0	113	3	50	0	166	318	
5:15 PM	15	1	8	0	0	24	0	1	0	1	0	2	1	23	71	0	0	95	2	0	0	1	0	0	3	1	136	1	55	0	193	317
5:30 PM	13	0	8	0	0	21	0	4	0	2	0	6	0	17	81	0	0	98	2	0	1	0	0	3	1	146	1	48	1	197	325	
5:45 PM	19	3	11	0	0	33	2	3	0	0	0	5	0	20	98	3	0	121	4	0	1	0	0	5	0	135	1	40	0	176	340	
Total Volume	65	4	38	0	0	107	5	12	0	5	0	22	2	82	340	3	0	427	8	0	3	1	0	12	2	530	6	193	1	732	1300	
% Approach Total	60.7	3.7	35.5	0.0	0.0		22.7	54.5	0.0	22.7	0.0		0.5	19.2	79.6	0.7	0.0		66.7	0.0	25.0	8.3	0.0		0.3	72.4	0.8	26.4	0.1			
PHF	0.855	0.333	0.864	0.000	0.000	0.811	0.417	0.750	0.000	0.625	0.000	0.611	0.500	0.891	0.867	0.250	0.000	0.882	0.500	0.000	0.750	0.250	0.000	0.600	0.500	0.908	0.500	0.877	0.250	0.929	0.956	
Entering Leg	65	4	38	0	0	107	5	12	0	5	0	22	2	82	340	3	0	427	8	0	3	1	0	12	2	530	6	193	1	732	1300	
Exiting Leg						283						8						581						9						419	1300	
Total						390						30						1008						21						1151	2600	

PDI File #: 207450 BBCC  
Location: N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway  
Location: E: Massachusetts Avenue W: Massachusetts Avenue  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD  
Count Date: Tuesday, February 4, 2020  
Start Time: 4:00 PM  
End Time: 6:00 PM  
Class:

PRECISION  
DATA  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue							Total
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	4	0	0	0	4	7
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	1	0	4	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	2	0	0	0	2	5	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4	0	1	0	5	7	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9	0	0	10	0	0	0	0	0	0	0	0	13	0	2	0	15	25
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	8	0	0	0	0	0	0	0	0	3	0	0	0	3	11
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	4
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	1	0	3	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	2	6
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	2	12	0	0	14	0	0	0	0	0	0	0	0	10	0	1	0	11	26
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	3	21	0	0	24	0	0	0	0	0	0	0	0	23	0	3	0	26	51
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	12.5	87.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.5	0.0	11.5	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	0.0	5.9	41.2	0.0	0.0	47.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.1	0.0	5.9	0.0	51.0	0.0
Exiting Leg Total	6						0						24						0						21						51	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	0	0	18	0	0	0	18	34
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.2	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.3	0.0	0.0	0.0	69.2	66.7
Exiting Leg Total	0						0						18						0						16						34	
Single-Unit Trucks	0	0	0	0	0	0	0	0	0	1	0	1	0	3	4	0	0	7	0	0	0	0	0	0	0	0	4	0	3	0	7	15
% Single-Unit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	19.0	0.0	0.0	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0	100.0	0.0	26.9	29.4
Exiting Leg Total	6						0						5						0						4						15	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	3.8	3.9
Exiting Leg Total	0						0						1						0						1						2	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue							Total
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	1	0	4	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	2	0	0	0	2	5	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4	0	1	0	5	7	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	8	0	0	0	0	0	0	0	3	0	0	0	3	11	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13	0	0	15	0	0	0	0	0	0	0	12	0	2	0	14	29	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	86.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.7	0.0	14.3	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.542	0.000	0.000	0.469	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.500	0.000	0.700	0.659	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	8	0	0	0	8	18	
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.9	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	57.1	62.1	
Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	0	3	0	2	0	5	9	
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	15.4	0.0	0.0	26.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	100.0	0.0	35.7	31.0	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2	
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	7.1	6.9	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	8	0	0	0	8	18	
Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	0	3	0	2	0	5	9	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2	
Total Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13	0	0	15	0	0	0	0	0	0	0	0	12	0	2	0	14	29
Buses	0						0						8						0						10							
Single-Unit Trucks	4						0						3						0						2							
Articulated Trucks	0						0						1						0						1							
Total Exiting Leg	4						0						12						0						13							

PDI File #: **207450 BBCC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 D A T A  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

# Buses

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	3	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	3	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	2	4
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	9	0	0	0	9	17
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	2	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	2	4
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	9	0	0	0	9	17
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	0	0	18	0	0	0	18	34
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.1	0.0	0.0	47.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.9	0.0	0.0	0.0	52.9	
Exiting Leg Total	0						0						18						0						16						34	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue								
	from North						from Northeast						from East						from South						from West								
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	0	3	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	2	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	2	6
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	8	0	0	0	0	8	18
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.667	0.750		
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	8	0	0	0	0	8	18
Exiting Leg	0						0						8						0						10						18		
Total	0						0						18						0						18						36		



PDI File #: **207450 BBCC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Single-Unit Trucks

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	3	0	2	0	5	7
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3	0	0	0	5	0	0	0	0	0	0	0	1	0	1	0	2	8
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	3	4	0	0	7	0	0	0	0	0	0	0	0	4	0	3	0	7	15
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.0	42.9	57.1	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	57.1	0.0	42.9	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	6.7	0.0	20.0	26.7	0.0	0.0	46.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.7	0.0	20.0	0.0	46.7	
Exiting Leg Total	6						0						5						0						4						15	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue							
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	4
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	0	0	3	0	2	0	5	9
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	60.0	0.0	40.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.250	0.500	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.500	0.000	0.417	0.563	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	0	0	3	0	2	0	5	9
Exiting Leg	4						0						3						0						2						9	
Total	4						0						7						0						7						18	

PDI File #: **207450 BBCC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Articulated Trucks

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	
Exiting Leg Total	0						0						1						0						1						

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2	
Exiting Leg	0						0						1						0						0						2	
Total	0						0						2						0						2						4	

PDI File #: **207450 BBCC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	Forest Street								Mirak Mill Park West Driveway								Massachusetts Avenue								Burton Street								Massachusetts Avenue								Total	
	from North								from Northeast								from East								from South								from West									
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2	4
5:00 PM	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	6	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	6	
Grand Total	1	1	0	0	0	0	0	2	0	0	0	1	0	0	0	0	1	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	4	10	
Approach %	50.0	50.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	50.0	0.0	0.0	0.0	0.0	25.0				
Total %	10.0	10.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	20.0	0.0	0.0	0.0	0.0	10.0	40.0			
Exiting Leg Total	0								0								3								2								5								10	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Forest Street							Mirak Mill Park West Driveway							Massachusetts Avenue							Burton Street							Massachusetts Avenue							Total					
	from North							from Northeast							from East							from South							from West												
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left		Left	U-Turn	CW-NB	CW-SB	Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
5:00 PM	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	6
Total Volume	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	4	9
% Approach Total	50.0	50.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	50.0	0.0	0.0	0.0	0.0	25.0		
PHF	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.250	0.500	0.375	
Entering Leg	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	4	9
Exiting Leg	0							0							2							2							5							9		9			
Total	2							0							5							2							9							18					

PDI File #: **207450 BBCC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:

**PRECISION  
D A T A  
INDUSTRIES, LLC**  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Pedestrians

	Forest Street								Mirak Mill Park West Driveway								Massachusetts Avenue								Burton Street								Massachusetts Avenue								Total
	from North								from Northeast								from East								from South								from West								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	2	2	10
4:15 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	3	1	4	12
4:30 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5		
4:45 PM	0	0	0	0	0	5	2	7	0	0	0	0	0	6	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	1	0	1	21
Total	0	0	0	0	0	9	4	13	0	0	0	0	0	9	5	14	0	0	0	0	0	0	0	0	0	0	0	0	5	8	13	0	0	0	0	0	5	3	8	48	
5:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	7	
5:15 PM	0	0	0	0	0	3	3	6	0	0	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	1	1	16
5:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	1	1	2	10
5:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	5	
Total	0	0	0	0	0	6	4	10	0	0	0	0	0	8	6	14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	10	0	0	0	0	0	1	3	4	38	
Grand Total	0	0	0	0	0	15	8	23	0	0	0	0	0	17	11	28	0	0	0	0	0	0	0	0	0	0	0	0	10	13	23	0	0	0	0	0	6	6	12	86	
Approach %	0	0	0	0	0	65.2	34.8		0	0	0	0	0	60.7	39.3		0	0	0	0	0	0	0	0	0	0	0	0	43.5	56.5		0	0	0	0	0	50	50			
Total %	0	0	0	0	0	17.4	9.3	26.7	0	0	0	0	0	19.8	12.8	32.6	0	0	0	0	0	0	0	0	0	0	0	0	11.6	15.1	26.7	0	0	0	0	0	6.98	6.98	14		
Exiting Leg Total	23								28								0								23								12								86

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Forest Street								Mirak Mill Park West Driveway								Massachusetts Avenue								Burton Street								Massachusetts Avenue								Total
	from North								from Northeast								from East								from South								from West								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
4:45 PM	0	0	0	0	0	5	2	7	0	0	0	0	0	6	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	1	0	1	21
5:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	7	
5:15 PM	0	0	0	0	0	3	3	6	0	0	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	1	1	16
5:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	1	1	2	10
Total Volume	0	0	0	0	0	11	5	16	0	0	0	0	0	13	6	19	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	14	0	0	0	0	0	2	3	5	54
% Approach Total	0.0	0.0	0.0	0.0	0.0	68.8	31.3		0.0	0.0	0.0	0.0	0.0	68.4	31.6		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	0.0	40.0	60.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.550	0.417	0.571	0.000	0.000	0.000	0.000	0.000	0.542	0.750	0.594	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.583	0.700	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.625	0.643	
Entering Leg	0	0	0	0	0	11	5	16	0	0	0	0	0	13	6	19	0	0	0	0	0	0	0	0	0	0	0	0	7	7	14	0	0	0	0	0	2	3	5	54	
Exiting Leg	16								19								0								14								5								54
Total	32								38								0								28								10								108



PDI File #: 207450 BC  
 Location: N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway  
 Location: E: Massachusetts Avenue W: Massachusetts Avenue  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 7:00 AM  
 End Time: 9:00 AM  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Cars and Heavy Vehicles (Combined)

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	46	4	20	0	0	70	0	1	0	0	0	1	0	8	90	0	0	98	3	0	1	0	0	4	0	88	2	13	0	103	276
7:15 AM	50	3	13	1	0	67	0	0	0	0	0	0	1	6	75	0	0	82	3	0	0	0	0	3	0	106	3	10	0	119	271
7:30 AM	53	11	13	0	0	77	0	0	0	0	0	0	3	29	102	1	1	136	8	0	2	0	0	10	0	97	2	22	0	121	344
7:45 AM	41	9	20	0	0	70	0	0	0	0	0	0	0	25	116	5	0	146	9	0	7	0	0	16	0	111	5	25	0	141	373
Total	190	27	66	1	0	284	0	1	0	0	0	1	4	68	383	6	1	462	23	0	10	0	0	33	0	402	12	70	0	484	1264
8:00 AM	57	1	21	0	0	79	1	0	0	1	0	2	2	27	124	2	0	155	0	0	0	0	0	0	1	82	4	28	0	115	351
8:15 AM	43	1	11	0	0	55	0	0	0	0	0	0	1	13	90	0	0	104	1	1	0	0	0	2	0	93	9	13	0	115	276
8:30 AM	31	0	10	1	0	42	0	0	0	0	0	0	0	14	93	0	0	107	4	0	2	1	0	7	0	103	4	13	0	120	276
8:45 AM	28	1	10	1	0	40	0	0	0	2	0	2	1	14	115	0	0	130	2	0	0	2	0	4	0	98	4	13	0	115	291
Total	159	3	52	2	0	216	1	0	0	3	0	4	4	68	422	2	0	496	7	1	2	3	0	13	1	376	21	67	0	465	1194
Grand Total	349	30	118	3	0	500	1	1	0	3	0	5	8	136	805	8	1	958	30	1	12	3	0	46	1	778	33	137	0	949	2458
Approach %	69.8	6.0	23.6	0.6	0.0		20.0	20.0	0.0	60.0	0.0		0.8	14.2	84.0	0.8	0.1		65.2	2.2	26.1	6.5	0.0		0.1	82.0	3.5	14.4	0.0		
Total %	14.2	1.2	4.8	0.1	0.0	20.3	0.0	0.0	0.0	0.1	0.0	0.2	0.3	5.5	32.8	0.3	0.0	39.0	1.2	0.0	0.5	0.1	0.0	1.9	0.0	31.7	1.3	5.6	0.0	38.6	
Exiting Leg Total	286						45						930						39						1158						2458
Cars	340	30	113	3	0	486	1	1	0	3	0	5	8	132	749	8	1	898	30	1	12	2	0	45	1	713	33	133	0	880	2314
% Cars	97.4	100.0	95.8	100.0	0.0	97.2	100.0	100.0	0.0	100.0	0.0	100.0	100.0	97.1	93.0	100.0	93.7		100.0	100.0	100.0	66.7	0.0	97.8	100.0	91.6	100.0	97.1	0.0	92.7	94.1
Exiting Leg Total	278						45						860						39						1092						2314
Heavy Vehicles	9	0	5	0	0	14	0	0	0	0	0	0	0	4	56	0	0	60	0	0	0	1	0	1	0	65	0	4	0	69	144
% Heavy Vehicles	2.6	0.0	4.2	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	7.0	0.0	0.0	6.3	0.0	0.0	0.0	33.3	0.0	2.2	0.0	8.4	0.0	2.9	0.0	7.3	5.9
Exiting Leg Total	8						0						70						0						66						144

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:30 AM	53	11	13	0	0	77	0	0	0	0	0	0	3	29	102	1	1	136	8	0	2	0	0	10	0	97	2	22	0	121	344
7:45 AM	41	9	20	0	0	70	0	0	0	0	0	0	0	25	116	5	0	146	9	0	7	0	0	16	0	111	5	25	0	141	373
8:00 AM	57	1	21	0	0	79	1	0	0	1	0	2	2	27	124	2	0	155	0	0	0	0	0	0	1	82	4	28	0	115	351
8:15 AM	43	1	11	0	0	55	0	0	0	0	0	0	1	13	90	0	0	104	1	1	0	0	0	2	0	93	9	13	0	115	276
Total Volume	194	22	65	0	0	281	1	0	0	1	0	2	6	94	432	8	1	541	18	1	9	0	0	28	1	383	20	88	0	492	1344
% Approach Total	69.0	7.8	23.1	0.0	0.0		50.0	0.0	0.0	50.0	0.0		1.1	17.4	79.9	1.5	0.2		64.3	3.6	32.1	0.0	0.0		0.2	77.8	4.1	17.9	0.0		
PHF	0.851	0.500	0.774	0.000	0.000	0.889	0.250	0.000	0.000	0.250	0.000	0.250	0.500	0.810	0.871	0.400	0.250	0.873	0.500	0.250	0.321	0.000	0.000	0.438	0.250	0.863	0.556	0.786	0.000	0.872	0.901
Cars	191	22	63	0	0	276	1	0	0	1	0	2	6	93	407	8	1	515	18	1	9	0	0	28	1	347	20	85	0	453	1274
Cars %	98.5	100.0	96.9	0.0	0.0	98.2	100.0	0.0	0.0	100.0	0.0	100.0	100.0	98.9	94.2	100.0	95.2		100.0	100.0	100.0	0.0	0.0	100.0	100.0	90.6	100.0	96.6	0.0	92.1	94.8
Heavy Vehicles	3	0	2	0	0	5	0	0	0	0	0	0	0	1	25	0	0	26	0	0	0	0	0	0	0	36	0	3	0	39	70
Heavy Vehicles %	1.5	0.0	3.1	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	5.8	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0	3.4	0.0	7.9	5.2
Cars Enter Leg	191	22	63	0	0	276	1	0	0	1	0	2	6	93	407	8	1	515	18	1	9	0	0	28	1	347	20	85	0	453	1274
Heavy Enter Leg	3	0	2	0	0	5	0	0	0	0	0	0	0	1	25	0	0	26	0	0	0	0	0	0	0	36	0	3	0	39	70
Total Entering Leg	194	22	65	0	0	281	1	0	0	1	0	2	6	94	432	8	1	541	18	1	9	0	0	28	1	383	20	88	0	492	1344
Cars Exiting Leg	188						27						430						31						598						1274
Heavy Exiting Leg	4						0						38						0						28						70
Total Exiting Leg	192						27						468						31						626						1344

PDI File #: **207450 BC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

# Cars

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	44	4	18	0	0	66	0	1	0	0	0	1	0	8	79	0	0	87	3	0	1	0	0	4	0	79	2	13	0	94	252
7:15 AM	48	3	13	1	0	65	0	0	0	0	0	0	1	5	69	0	0	75	3	0	0	0	0	3	0	97	3	10	0	110	253
7:30 AM	52	11	13	0	0	76	0	0	0	0	0	0	3	28	94	1	1	127	8	0	2	0	0	10	0	88	2	19	0	109	322
7:45 AM	41	9	20	0	0	70	0	0	0	0	0	0	0	25	110	5	0	140	9	0	7	0	0	16	0	100	5	25	0	130	356
Total	185	27	64	1	0	277	0	1	0	0	0	1	4	66	352	6	1	429	23	0	10	0	0	33	0	364	12	67	0	443	1183
8:00 AM	57	1	19	0	0	77	1	0	0	1	0	2	2	27	118	2	0	149	0	0	0	0	0	0	1	77	4	28	0	110	338
8:15 AM	41	1	11	0	0	53	0	0	0	0	0	0	1	13	85	0	0	99	1	1	0	0	0	2	0	82	9	13	0	104	258
8:30 AM	30	0	10	1	0	41	0	0	0	0	0	0	0	13	86	0	0	99	4	0	2	1	0	7	0	98	4	12	0	114	261
8:45 AM	27	1	9	1	0	38	0	0	0	2	0	2	1	13	108	0	0	122	2	0	0	1	0	3	0	92	4	13	0	109	274
Total	155	3	49	2	0	209	1	0	0	3	0	4	4	66	397	2	0	469	7	1	2	2	0	12	1	349	21	66	0	437	1131
Grand Total	340	30	113	3	0	486	1	1	0	3	0	5	8	132	749	8	1	898	30	1	12	2	0	45	1	713	33	133	0	880	2314
Approach %	70.0	6.2	23.3	0.6	0.0		20.0	20.0	0.0	60.0	0.0		0.9	14.7	83.4	0.9	0.1		66.7	2.2	26.7	4.4	0.0		0.1	81.0	3.8	15.1	0.0		
Total %	14.7	1.3	4.9	0.1	0.0	21.0	0.0	0.0	0.0	0.1	0.0	0.2	0.3	5.7	32.4	0.3	0.0	38.8	1.3	0.0	0.5	0.1	0.0	1.9	0.0	30.8	1.4	5.7	0.0	38.0	
Exiting Leg Total						278						45					860						39							1092	2314

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:30 AM	52	11	13	0	0	76	0	0	0	0	0	0	3	28	94	1	1	127	8	0	2	0	0	10	0	88	2	19	0	109	322
7:45 AM	41	9	20	0	0	70	0	0	0	0	0	0	0	25	110	5	0	140	9	0	7	0	0	16	0	100	5	25	0	130	356
8:00 AM	57	1	19	0	0	77	1	0	0	1	0	2	2	27	118	2	0	149	0	0	0	0	0	0	1	77	4	28	0	110	338
8:15 AM	41	1	11	0	0	53	0	0	0	0	0	0	1	13	85	0	0	99	1	1	0	0	0	2	0	82	9	13	0	104	258
Total Volume	191	22	63	0	0	276	1	0	0	1	0	2	6	93	407	8	1	515	18	1	9	0	0	28	1	347	20	85	0	453	1274
% Approach Total	69.2	8.0	22.8	0.0	0.0		50.0	0.0	0.0	50.0	0.0		1.2	18.1	79.0	1.6	0.2		64.3	3.6	32.1	0.0	0.0		0.2	76.6	4.4	18.8	0.0		
PHF	0.838	0.500	0.788	0.000	0.000	0.896	0.250	0.000	0.000	0.250	0.000	0.250	0.500	0.830	0.862	0.400	0.250	0.864	0.500	0.250	0.321	0.000	0.000	0.438	0.250	0.868	0.556	0.759	0.000	0.871	0.895
Entering Leg	191	22	63	0	0	276	1	0	0	1	0	2	6	93	407	8	1	515	18	1	9	0	0	28	1	347	20	85	0	453	1274
Exiting Leg						188						27						430						31						598	1274
Total						464						29						945						59						1051	2548

PDI File #: 207450 BC  
Location: N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway  
Location: E: Massachusetts Avenue W: Massachusetts Avenue  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD  
Count Date: Tuesday, February 4, 2020  
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PRECISION  
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46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
7:00 AM	2	0	2	0	0	4	0	0	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	0	0	9	0	0	0	9	24
7:15 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	0	0	0	9	0	0	0	9	18
7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	8	0	0	9	0	0	0	0	0	0	0	0	9	0	3	0	12	22
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	11	0	0	0	11	17
Total	5	0	2	0	0	7	0	0	0	0	0	0	0	2	31	0	0	33	0	0	0	0	0	0	0	0	38	0	3	0	41	81
8:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	5	0	0	0	5	13
8:15 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	11	0	0	0	11	18
8:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	7	0	0	8	0	0	0	0	0	0	0	0	5	0	1	0	6	15
8:45 AM	1	0	1	0	0	2	0	0	0	0	0	0	0	1	7	0	0	8	0	0	0	1	0	1	0	0	6	0	0	0	6	17
Total	4	0	3	0	0	7	0	0	0	0	0	0	0	2	25	0	0	27	0	0	0	1	0	1	0	0	27	0	1	0	28	63
Grand Total	9	0	5	0	0	14	0	0	0	0	0	0	0	4	56	0	0	60	0	0	0	1	0	1	0	0	65	0	4	0	69	144
Approach %	64.3	0.0	35.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	6.7	93.3	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.0	94.2	0.0	5.8	0.0			
Total %	6.3	0.0	3.5	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	38.9	0.0	0.0	41.7	0.0	0.0	0.0	0.7	0.0	0.7	0.0	45.1	0.0	2.8	0.0	47.9		
Exiting Leg Total	8						0						70						0						66						144	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	0	0	0	21	0	0	0	21	45
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.3	0.0	0.0	0.0	30.4	31.3
Exiting Leg Total	0						0						21						0						24						45	
Single-Unit Trucks	9	0	5	0	0	14	0	0	0	0	0	0	0	3	29	0	0	32	0	0	0	1	0	1	0	0	38	0	3	0	41	88
% Single-Unit	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	51.8	0.0	0.0	53.3	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	58.5	0.0	75.0	0.0	59.4	61.1
Exiting Leg Total	6						0						43						0						39						88	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	0	0	6	0	1	0	7	11
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	5.4	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.0	25.0	0.0	10.1	7.6
Exiting Leg Total	2						0						6						0						3						11	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
7:00 AM	2	0	2	0	0	4	0	0	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	0	0	9	0	0	0	9	24
7:15 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	0	0	0	9	0	0	0	9	18
7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	8	0	0	9	0	0	0	0	0	0	0	0	9	0	3	0	12	22
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	11	0	0	0	11	17	
Total Volume	5	0	2	0	0	7	0	0	0	0	0	0	0	2	31	0	0	33	0	0	0	0	0	0	0	0	38	0	3	0	41	81
% Approach Total	71.4	0.0	28.6	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	6.1	93.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	92.7	0.0	7.3	0.0			
PHF	0.625	0.000	0.250	0.000	0.000	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.705	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.864	0.000	0.250	0.000	0.854	0.844	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	0	9	0	0	0	9	24
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.4	0.0	0.0	45.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.7	0.0	0.0	0.0	22.0	29.6
Single-Unit Trucks	5	0	2	0	0	7	0	0	0	0	0	0	0	2	15	0	0	17	0	0	0	0	0	0	0	0	24	0	2	0	26	50
Single-Unit %	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	48.4	0.0	0.0	51.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.2	0.0	66.7	0.0	63.4	61.7
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	5	0	1	0	6	7
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	33.3	0.0	14.6	8.6
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	0	9	0	0	0	9	24
Single-Unit Trucks	5	0	2	0	0	7	0	0	0	0	0	0	0	2	15	0	0	17	0	0	0	0	0	0	0	0	24	0	2	0	26	50
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	5	0	1	0	6	7
Total Entering Leg	5	0	2	0	0	7	0	0	0	0	0	0	0	2	31	0	0	33	0	0	0	0	0	0	0	0	38	0	3	0	41	81
Buses	0						0						9						0						15						24	
Single-Unit Trucks	4						0						26						0						20						50	
Articulated Trucks	1						0						5						0						1						7	
Total Exiting Leg	5						0						40						0				36						81			

PDI File #: **207450 BC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
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 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Buses

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	4	0	0	0	4	9
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	2	0	0	0	2	6	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	3	6
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	0	9	0	0	0	9	24
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	4	0	0	0	4	7
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	2	0	0	0	2	5	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	2	0	0	0	2	5	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	0	12	0	0	0	12	21
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	0	0	0	21	0	0	0	21	45
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3	0.0	0.0	53.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.7	0.0	0.0	0.0	46.7	
Exiting Leg Total	0						0						21						0						24						45	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue							
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	4	0	0	0	0	9
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	6	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	6	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	0	9	0	0	0	9	24
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.563	0.000	0.000	0.000	0.563	0.667	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	0	9	0	0	0	9	24
Exiting Leg						0						0					9													15	24	
Total						0						0					24								0					24	48	



PDI File #: **207450 BC**  
 Location: **N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 DATA  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Single-Unit Trucks

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	2	0	2	0	0	4	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	4	0	0	0	4	14
7:15 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	4	0	0	0	4	9
7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	5	0	0	6	0	0	0	0	0	0	0	9	0	2	0	11	18
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	7	0	0	0	7	9
Total	5	0	2	0	0	7	0	0	0	0	0	0	0	2	15	0	0	17	0	0	0	0	0	0	0	24	0	2	0	26	50
8:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	6
8:15 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	6	0	0	0	6	12
8:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	0	3	0	1	0	4	10
8:45 AM	1	0	1	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	1	0	4	0	0	0	4	10
Total	4	0	3	0	0	7	0	0	0	0	0	0	0	1	14	0	0	15	0	0	0	1	0	1	0	14	0	1	0	15	38
Grand Total	9	0	5	0	0	14	0	0	0	0	0	0	0	3	29	0	0	32	0	0	0	1	0	1	0	38	0	3	0	41	88
Approach %	64.3	0.0	35.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	9.4	90.6	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.0	92.7	0.0	7.3	0.0		
Total %	10.2	0.0	5.7	0.0	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	33.0	0.0	0.0	36.4	0.0	0.0	0.0	1.1	0.0	1.1	0.0	43.2	0.0	3.4	0.0	46.6	
Exiting Leg Total	6						0						43						0						39						88

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total	
	from North						from Northeast						from East						from South						from West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
7:00 AM	2	0	2	0	0	4	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	14	
7:15 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	4	4	0	0	0	4	9
7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	5	0	0	6	0	0	0	0	0	0	0	9	0	2	0	0	11	18
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	7	0	0	0	0	7	9
Total Volume	5	0	2	0	0	7	0	0	0	0	0	0	0	2	15	0	0	17	0	0	0	0	0	0	0	24	0	2	0	26	50	
% Approach Total	71.4	0.0	28.6	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	11.8	88.2	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	92.3	0.0	7.7	0.0			
PHF	0.625	0.000	0.250	0.000	0.000	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.625	0.000	0.000	0.708	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.667	0.000	0.250	0.000	0.591	0.694	
Entering Leg	5	0	2	0	0	7	0	0	0	0	0	0	0	2	15	0	0	17	0	0	0	0	0	0	0	24	0	2	0	26	50	
Exiting Leg						4						0						26							0					20	50	
Total						11						0						43						0						46	100	

PDI File #: 207450 BC  
Location: N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway  
Location: E: Massachusetts Avenue W: Massachusetts Avenue  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD  
Count Date: Tuesday, February 4, 2020  
Start Time: 7:00 AM  
End Time: 9:00 AM  
Class:

PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Articulated Trucks

	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	5	0	1	0	6	7
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	4
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	0	6	0	1	0	7	11
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	25.0	75.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	85.7	0.0	14.3	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	27.3	0.0	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.5	0.0	9.1	0.0	63.6	
Exiting Leg Total	2						0						6						0						3						11

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street						Mirak Mill Park West Driveway						Massachusetts Avenue						Burton Street						Massachusetts Avenue						Total
	from North						from Northeast						from East						from South						from West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	5	0	1	0	6	
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	83.3	0.0	16.7	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.000	0.250	0.000	0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	5	0	1	0	6	
Exiting Leg	1						0						5						0						1						
Total	1						0						6						0						7						

PDI File #: 207450 BC  
Location: N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway  
Location: E: Massachusetts Avenue W: Massachusetts Avenue  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD  
Count Date: Tuesday, February 4, 2020  
Start Time: 7:00 AM  
End Time: 9:00 AM  
Class:

PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

	Forest Street								Mirak Mill Park West Driveway								Massachusetts Avenue								Burton Street								Massachusetts Avenue								Total	
	from North								from Northeast								from East								from South								from West									
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4	5	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	4	0	3	0	0	0	7	8		
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	5	0	3	0	0	0	8	12		
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5	0.0	37.5	0.0	0.0	0.0				
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.7	0.0	25.0	0.0	0.0	0.0	66.7			
Exiting Leg Total	3								0								5								0								4								12	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Forest Street							Mirak Mill Park West Driveway							Massachusetts Avenue							Burton Street							Massachusetts Avenue							Total					
	from North							from Northeast							from East							from South							from West												
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left		Left	U-Turn	CW-NB	CW-SB	Total
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	3	0	0	0	7	8
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	57.1	0.0	42.9	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.750	0.000	0.000	0.000	0.438	0.400	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	3	0	0	0	7	8
Exiting Leg																																									8
Total	3							0							5							0							8							16					

PDI File #: 207450 BC  
Location: N: Forest Street S: Burton Street NE: Mirak Mill Park West Driveway  
Location: E: Massachusetts Avenue W: Massachusetts Avenue  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD  
Count Date: Tuesday, February 4, 2020  
Start Time: 7:00 AM  
End Time: 9:00 AM  
Class:

PRECISION  
DATA  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Pedestrians

	Forest Street								Mirak Mill Park West Driveway								Massachusetts Avenue								Burton Street								Massachusetts Avenue								Total
	from North								from Northeast								from East								from South								from West								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	1	6
7:15 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	6			
7:30 AM	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	28	28	38	
7:45 AM	0	0	0	0	0	0	0	4	4	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	16	16	23	
Total	0	0	0	0	0	1	8	9		0	0	0	0	0	6	2	8	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	1	47	48	73	
8:00 AM	0	0	0	0	0	0	1	1		0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3			
8:15 AM	0	0	0	0	0	0	0	0		0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
8:30 AM	0	0	0	0	0	0	0	1	1		0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	1	0	1	7	
8:45 AM	0	0	0	0	0	0	1	0	1		0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Total	0	0	0	0	0	1	2	3		0	0	0	0	0	5	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	1	1	2	15
Grand Total	0	0	0	0	0	2	10	12		0	0	0	0	0	11	5	16	0	0	0	0	0	0	0	0	0	0	0	0	4	6	10	0	0	0	0	2	48	50	88	
Approach %	0	0	0	0	0	16.7	83.3			0	0	0	0	0	68.8	31.3		0	0	0	0	0	0	0	0	0	0	0	0	0	40	60		0	0	0	0	4	96		
Total %	0	0	0	0	0	2.27	11.4	13.6		0	0	0	0	0	12.5	5.68	18.2	0	0	0	0	0	0	0	0	0	0	0	0	0	4.55	6.82	11.4	0	0	0	0	2.27	54.5	56.8	
Exiting Leg Total	12								16								0								10								50								88

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street								Mirak Mill Park West Driveway								Massachusetts Avenue								Burton Street								Massachusetts Avenue								Total
	from North								from Northeast								from East								from South								from West								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	1	6
7:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	6	6			
7:30 AM	0	0	0	0	0	0	4	4	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	28	28	38		
7:45 AM	0	0	0	0	0	0	4	4	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	16	16	23		
Total Volume	0	0	0	0	0	1	8	9	0	0	0	0	0	6	2	8	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	1	47	48	73		
% Approach Total	0.0	0.0	0.0	0.0	0.0	11.1	88.9		0.0	0.0	0.0	0.0	0.0	75.0	25.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5	62.5		0.0	0.0	0.0	0.0	0.0	2.1	97.9			
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.563	0.000	0.000	0.000	0.000	0.000	0.750	0.250	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.313	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.420	0.429	0.480	
Entering Leg	0	0	0	0	0	1	8	9	0	0	0	0	0	6	2	8	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	0	1	47	48	73	
Exiting Leg								9								8															8							48	73		
Total								18							16		0													16							96		146		



PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:

PRECISION  
 D A T A  
 INDUSTRIES, LLC  
 46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars and Heavy Vehicles (Combined)**

	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	94	0	0	94	0	1	0	1	0	113	1	114	209
7:15 AM	79	0	0	79	0	2	0	2	0	115	0	115	196
7:30 AM	138	0	0	138	3	0	0	3	1	123	0	124	265
7:45 AM	143	0	0	143	0	1	0	1	0	139	0	139	283
Total	454	0	0	454	3	4	0	7	1	490	1	492	953
8:00 AM	152	0	0	152	4	0	0	4	0	105	0	105	261
8:15 AM	104	0	0	104	0	0	0	0	1	103	0	104	208
8:30 AM	107	0	0	107	0	1	0	1	0	120	0	120	228
8:45 AM	130	0	0	130	0	0	0	0	0	112	0	112	242
Total	493	0	0	493	4	1	0	5	1	440	0	441	939
Grand Total	947	0	0	947	7	5	0	12	2	930	1	933	1892
Approach %	100.0	0.0	0.0		58.3	41.7	0.0		0.2	99.7	0.1		
Total %	50.1	0.0	0.0	50.1	0.4	0.3	0.0	0.6	0.1	49.2	0.1	49.3	
Exiting Leg Total	937				2				953				1892
Cars	886	0	0	886	7	5	0	12	2	855	1	858	1756
% Cars	93.6	0.0	0.0	93.6	100.0	100.0	0.0	100.0	100.0	91.9	100.0	92.0	92.8
Exiting Leg Total	862				2				892				1756
Heavy Vehicles	61	0	0	61	0	0	0	0	0	75	0	75	136
% Heavy Vehicles	6.4	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	8.1	0.0	8.0	7.2
Exiting Leg Total	75				0				61				136

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	138	0	0	138	3	0	0	3	1	123	0	124	265
7:45 AM	143	0	0	143	0	1	0	1	0	139	0	139	283
8:00 AM	152	0	0	152	4	0	0	4	0	105	0	105	261
8:15 AM	104	0	0	104	0	0	0	0	1	103	0	104	208
Total Volume	537	0	0	537	7	1	0	8	2	470	0	472	1017
% Approach Total	100.0	0.0	0.0		87.5	12.5	0.0		0.4	99.6	0.0		
PHF	0.883	0.000	0.000	0.883	0.438	0.250	0.000	0.500	0.500	0.845	0.000	0.849	0.898
Cars	510	0	0	510	7	1	0	8	2	429	0	431	949
Cars %	95.0	0.0	0.0	95.0	100.0	100.0	0.0	100.0	100.0	91.3	0.0	91.3	93.3
Heavy Vehicles	27	0	0	27	0	0	0	0	0	41	0	41	68
Heavy Vehicles %	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0	8.7	6.7
Cars Enter Leg	510	0	0	510	7	1	0	8	2	429	0	431	949
Heavy Enter Leg	27	0	0	27	0	0	0	0	0	41	0	41	68
Total Entering Leg	537	0	0	537	7	1	0	8	2	470	0	472	1017
Cars Exiting Leg				436				2				511	949
Heavy Exiting Leg				41				0				27	68
Total Exiting Leg				477				2				538	1017

PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**



Class: **Cars**

	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	83	0	0	83	0	1	0	1	0	100	1	101	185
7:15 AM	72	0	0	72	0	2	0	2	0	107	0	107	181
7:30 AM	129	0	0	129	3	0	0	3	1	112	0	113	245
7:45 AM	137	0	0	137	0	1	0	1	0	127	0	127	265
Total	421	0	0	421	3	4	0	7	1	446	1	448	876
8:00 AM	145	0	0	145	4	0	0	4	0	98	0	98	247
8:15 AM	99	0	0	99	0	0	0	0	1	92	0	93	192
8:30 AM	98	0	0	98	0	1	0	1	0	114	0	114	213
8:45 AM	123	0	0	123	0	0	0	0	0	105	0	105	228
Total	465	0	0	465	4	1	0	5	1	409	0	410	880
Grand Total	886	0	0	886	7	5	0	12	2	855	1	858	1756
Approach %	100.0	0.0	0.0		58.3	41.7	0.0		0.2	99.7	0.1		
Total %	50.5	0.0	0.0	50.5	0.4	0.3	0.0	0.7	0.1	48.7	0.1	48.9	
Exiting Leg Total	862				2				892				1756

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	129	0	0	129	3	0	0	3	1	112	0	113	245
7:45 AM	137	0	0	137	0	1	0	1	0	127	0	127	265
8:00 AM	145	0	0	145	4	0	0	4	0	98	0	98	247
8:15 AM	99	0	0	99	0	0	0	0	1	92	0	93	192
Total Volume	510	0	0	510	7	1	0	8	2	429	0	431	949
% Approach Total	100.0	0.0	0.0		87.5	12.5	0.0		0.5	99.5	0.0		
PHF	0.879	0.000	0.000	0.879	0.438	0.250	0.000	0.500	0.500	0.844	0.000	0.848	0.895
Entering Leg	510	0	0	510	7	1	0	8	2	429	0	431	949
Exiting Leg				436				2				511	949
Total				946				10				942	1898

PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**



Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	11	0	0	11	0	0	0	0	0	13	0	13	24
7:15 AM	7	0	0	7	0	0	0	0	0	8	0	8	15
7:30 AM	9	0	0	9	0	0	0	0	0	11	0	11	20
7:45 AM	6	0	0	6	0	0	0	0	0	12	0	12	18
Total	33	0	0	33	0	0	0	0	0	44	0	44	77
8:00 AM	7	0	0	7	0	0	0	0	0	7	0	7	14
8:15 AM	5	0	0	5	0	0	0	0	0	11	0	11	16
8:30 AM	9	0	0	9	0	0	0	0	0	6	0	6	15
8:45 AM	7	0	0	7	0	0	0	0	0	7	0	7	14
Total	28	0	0	28	0	0	0	0	0	31	0	31	59
Grand Total	61	0	0	61	0	0	0	0	0	75	0	75	136
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	44.9	0.0	0.0	44.9	0.0	0.0	0.0	0.0	0.0	55.1	0.0	55.1	
Exiting Leg Total				75				0				61	136
Buses	25	0	0	25	0	0	0	0	0	22	0	22	47
% Buses	41.0	0.0	0.0	41.0	0.0	0.0	0.0	0.0	0.0	29.3	0.0	29.3	34.6
Exiting Leg Total				22				0				25	47
Single-Unit Trucks	33	0	0	33	0	0	0	0	0	47	0	47	80
% Single-Unit	54.1	0.0	0.0	54.1	0.0	0.0	0.0	0.0	0.0	62.7	0.0	62.7	58.8
Exiting Leg Total				47				0				33	80
Articulated Trucks	3	0	0	3	0	0	0	0	0	6	0	6	9
% Articulated	4.9	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	8.0	0.0	8.0	6.6
Exiting Leg Total				6				0				3	9

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
7:00 AM	11	0	0	11	0	0	0	0	0	13	0	13	24	
7:15 AM	7	0	0	7	0	0	0	0	0	8	0	8	15	
7:30 AM	9	0	0	9	0	0	0	0	0	11	0	11	20	
7:45 AM	6	0	0	6	0	0	0	0	0	12	0	12	18	
Total Volume	33	0	0	33	0	0	0	0	0	44	0	44	77	
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0			0.0	100.0	0.0		
PHF	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000		0.000	0.846	0.000	0.846	0.802
Buses	16	0	0	16	0	0	0	0	0	10	0	10	26	
Buses %	48.5	0.0	0.0	48.5	0.0	0.0	0.0	0.0	0.0	22.7	0.0	22.7	33.8	
Single-Unit Trucks	17	0	0	17	0	0	0	0	0	29	0	29	46	
Single-Unit %	51.5	0.0	0.0	51.5	0.0	0.0	0.0	0.0	0.0	65.9	0.0	65.9	59.7	
Articulated Trucks	0	0	0	0	0	0	0	0	0	5	0	5	5	
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4	0.0	11.4	6.5	
Buses	16	0	0	16	0	0	0	0	0	10	0	10	26	
Single-Unit Trucks	17	0	0	17	0	0	0	0	0	29	0	29	46	
Articulated Trucks	0	0	0	0	0	0	0	0	0	5	0	5	5	
Total Entering Leg	33	0	0	33	0	0	0	0	0	44	0	44	77	
Buses				10				0				16	26	
Single-Unit Trucks				29				0				17	46	
Articulated Trucks				5				0				0	5	
Total Exiting Leg				44				0				33	77	

PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Buses

	Massachusetts Avenue					Pine Court					Massachusetts Avenue					Total
	from East					from South					from West					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
7:00 AM	5	0	0	0	5	0	0	0	0	0	0	4	0	0	4	9
7:15 AM	4	0	0	0	4	0	0	0	0	0	0	2	0	0	2	6
7:30 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	3	0	0	0	3	0	0	0	0	0	0	4	0	0	4	7
Total	16	0	0	0	16	0	0	0	0	0	0	10	0	0	10	26
8:00 AM	3	0	0	0	3	0	0	0	0	0	0	4	0	0	4	7
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
8:30 AM	3	0	0	0	3	0	0	0	0	0	0	2	0	0	2	5
8:45 AM	3	0	0	0	3	0	0	0	0	0	0	2	0	0	2	5
Total	9	0	0	0	9	0	0	0	0	0	0	12	0	0	12	21
Grand Total	25	0	0	0	25	0	0	0	0	0	0	22	0	0	22	47
Approach %	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	53.2	0.0	0.0	0.0	53.2	0.0	0.0	0.0	0.0	0.0	0.0	46.8	0.0	0.0	46.8	
Exiting Leg Total	22					0					25					47

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	5	0	0	5	0	0	0	0	0	4	0	4	9
7:15 AM	4	0	0	4	0	0	0	0	0	2	0	2	6
7:30 AM	4	0	0	4	0	0	0	0	0	0	0	0	4
7:45 AM	3	0	0	3	0	0	0	0	0	4	0	4	7
Total Volume	16	0	0	16	0	0	0	0	0	10	0	10	26
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.800	0.000	0.000	0.800	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.625	0.722
Entering Leg	16	0	0	16	0	0	0	0	0	10	0	10	26
Exiting Leg				10				0				16	26
Total				26				0				26	52



PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Single-Unit Trucks

	Massachusetts Avenue					Pine Court					Massachusetts Avenue					Total
	from East					from South					from West					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
7:00 AM	6	0	0	6		0	0	0	0		0	7	0	7		13
7:15 AM	3	0	0	3		0	0	0	0		0	4	0	4		7
7:30 AM	5	0	0	5		0	0	0	0		0	10	0	10		15
7:45 AM	3	0	0	3		0	0	0	0		0	8	0	8		11
Total	17	0	0	17		0	0	0	0		0	29	0	29		46
8:00 AM	4	0	0	4		0	0	0	0		0	3	0	3		7
8:15 AM	4	0	0	4		0	0	0	0		0	6	0	6		10
8:30 AM	6	0	0	6		0	0	0	0		0	4	0	4		10
8:45 AM	2	0	0	2		0	0	0	0		0	5	0	5		7
Total	16	0	0	16		0	0	0	0		0	18	0	18		34
Grand Total	33	0	0	33		0	0	0	0		0	47	0	47		80
Approach %	100.0	0.0	0.0			0.0	0.0	0.0			0.0	100.0	0.0			
Total %	41.3	0.0	0.0	41.3		0.0	0.0	0.0	0.0		0.0	58.8	0.0	58.8		
Exiting Leg Total	47					0					33					80

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	6	0	0	6	0	0	0	0	0	7	0	7	13
7:15 AM	3	0	0	3	0	0	0	0	0	4	0	4	7
7:30 AM	5	0	0	5	0	0	0	0	0	10	0	10	15
7:45 AM	3	0	0	3	0	0	0	0	0	8	0	8	11
Total Volume	17	0	0	17	0	0	0	0	0	29	0	29	46
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.708	0.000	0.000	0.708	0.000	0.000	0.000	0.000	0.000	0.725	0.000	0.725	0.767
Entering Leg	17	0	0	17	0	0	0	0	0	29	0	29	46
Exiting Leg				29								17	46
Total				46				0				46	92

PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Articulated Trucks

	Massachusetts Avenue					Pine Court					Massachusetts Avenue					Total
	from East					from South					from West					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	1	0	0	0	0	0	0	1	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2
Total	3	0	0	3	3	0	0	0	0	0	0	1	0	0	1	4
Grand Total	3	0	0	3	3	0	0	0	0	0	0	6	0	0	6	9
Approach %	100.0	0.0	0.0			0.0	0.0	0.0			0.0	100.0	0.0			
Total %	33.3	0.0	0.0	33.3		0.0	0.0	0.0	0.0		0.0	66.7	0.0	66.7		
Exiting Leg Total	6					0					3					9

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	5	0	5	5
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.625	0.625
Entering Leg	0	0	0	0	0	0	0	0	0	5	0	5	5
Exiting Leg				5				0				0	5
Total				5				0				5	10

PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**



Class: **Bicycles (on Roadway and Crosswalks)**

	Massachusetts Avenue						Pine Court						Massachusetts Avenue						Total	
	from East						from South						from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	3	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	2	5
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	2	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	3	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	4	5
Grand Total	4	0	0	0	0	4	0	0	0	0	0	0	0	6	0	0	0	0	6	10
Approach %	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
Total %	40.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	60.0		
Exiting Leg Total	6						0						4						10	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Massachusetts Avenue						Pine Court						Massachusetts Avenue						Total	
	from East						from South						from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
7:30 AM	3	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	2	5
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total Volume	3	0	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	3	6
% Approach Total	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.375		0.300
Entering Leg	3	0	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	3		6
Exiting Leg						3						0						3		6
Total						6						0						6		12

PDI File #: **207450 D**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Pedestrians

	Massachusetts Avenue						Pine Court						Massachusetts Avenue						Total	
	from East						from South						from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	3	7	10	0	0	0	0	0	0	10
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	0	5
Grand Total	0	0	0	0	0	0	0	0	0	0	4	11	15	0	0	0	0	0	0	15
Approach %	0	0	0	0	0	0	0	0	0	0	26.667	73.333		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	26.667	73.333	100	0	0	0	0	0	0	
Exiting Leg Total	0						15						0						15	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Massachusetts Avenue						Pine Court							Massachusetts Avenue							Total
	from East						from South							from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total			
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	4	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	4	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	
Total Volume	0	0	0	0	0	0	0	0	0	0	3	7	10	0	0	0	0	0	0	10	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	70.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.438	0.625		0.000	0.000	0.000	0.000	0.000	0.000	0.625	
Entering Leg	0	0	0	0	0	0	0	0	0	0	3	7	10	0	0	0	0	0	0	10	
Exiting Leg	0						10							0							10
Total	0						20							0							20



PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	118	0	0	118	0	0	0	0	1	127	0	128	246
4:15 PM	99	1	0	100	0	0	0	0	0	121	0	121	221
4:30 PM	111	0	0	111	0	1	0	1	0	128	0	128	240
4:45 PM	117	0	1	118	0	0	0	0	0	147	0	147	265
Total	445	1	1	447	0	1	0	1	1	523	0	524	972
5:00 PM	122	1	0	123	1	0	0	1	1	130	0	131	255
5:15 PM	99	0	0	99	0	0	0	0	1	151	0	152	251
5:30 PM	99	1	0	100	0	0	0	0	1	160	0	161	261
5:45 PM	123	0	0	123	0	1	0	1	0	147	0	147	271
Total	443	2	0	445	1	1	0	2	3	588	0	591	1038
Grand Total	888	3	1	892	1	2	0	3	4	1111	0	1115	2010
Approach %	99.6	0.3	0.1		33.3	66.7	0.0		0.4	99.6	0.0		
Total %	44.2	0.1	0.0	44.4	0.0	0.1	0.0	0.1	0.2	55.3	0.0	55.5	
Exiting Leg Total				1113				7				890	2010
Cars	864	3	1	868	1	2	0	3	4	1087	0	1091	1962
% Cars	97.3	100.0	100.0	97.3	100.0	100.0	0.0	100.0	100.0	97.8	0.0	97.8	97.6
Exiting Leg Total				1089				7				866	1962
Heavy Vehicles	24	0	0	24	0	0	0	0	0	24	0	24	48
% Heavy Vehicles	2.7	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.2	2.4
Exiting Leg Total				24				0				24	48

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	122	1	0	123	1	0	0	1	1	130	0	131	255
5:15 PM	99	0	0	99	0	0	0	0	1	151	0	152	251
5:30 PM	99	1	0	100	0	0	0	0	1	160	0	161	261
5:45 PM	123	0	0	123	0	1	0	1	0	147	0	147	271
Total Volume	443	2	0	445	1	1	0	2	3	588	0	591	1038
% Approach Total	99.6	0.4	0.0		50.0	50.0	0.0		0.5	99.5	0.0		
PHF	0.900	0.500	0.000	0.904	0.250	0.250	0.000	0.500	0.750	0.919	0.000	0.918	0.958
Cars	429	2	0	431	1	1	0	2	3	577	0	580	1013
Cars %	96.8	100.0	0.0	96.9	100.0	100.0	0.0	100.0	100.0	98.1	0.0	98.1	97.6
Heavy Vehicles	14	0	0	14	0	0	0	0	0	11	0	11	25
Heavy Vehicles %	3.2	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	1.9	0.0	1.9	2.4
Cars Enter Leg	429	2	0	431	1	1	0	2	3	577	0	580	1013
Heavy Enter Leg	14	0	0	14	0	0	0	0	0	11	0	11	25
Total Entering Leg	443	2	0	445	1	1	0	2	3	588	0	591	1038
Cars Exiting Leg				578				5				430	1013
Heavy Exiting Leg				11				0				14	25
Total Exiting Leg				589				5				444	1038

PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**



Class: **Cars**

	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	115	0	0	115	0	0	0	0	1	123	0	124	239
4:15 PM	97	1	0	98	0	0	0	0	0	118	0	118	216
4:30 PM	108	0	0	108	0	1	0	1	0	126	0	126	235
4:45 PM	115	0	1	116	0	0	0	0	0	143	0	143	259
Total	435	1	1	437	0	1	0	1	1	510	0	511	949
5:00 PM	114	1	0	115	1	0	0	1	1	127	0	128	244
5:15 PM	98	0	0	98	0	0	0	0	1	148	0	149	247
5:30 PM	98	1	0	99	0	0	0	0	1	157	0	158	257
5:45 PM	119	0	0	119	0	1	0	1	0	145	0	145	265
Total	429	2	0	431	1	1	0	2	3	577	0	580	1013
Grand Total	864	3	1	868	1	2	0	3	4	1087	0	1091	1962
Approach %	99.5	0.3	0.1		33.3	66.7	0.0		0.4	99.6	0.0		
Total %	44.0	0.2	0.1	44.2	0.1	0.1	0.0	0.2	0.2	55.4	0.0	55.6	
Exiting Leg Total	1089				7				866				1962

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	114	1	0	115	1	0	0	1	1	127	0	128	244
5:15 PM	98	0	0	98	0	0	0	0	1	148	0	149	247
5:30 PM	98	1	0	99	0	0	0	0	1	157	0	158	257
5:45 PM	119	0	0	119	0	1	0	1	0	145	0	145	265
Total Volume	429	2	0	431	1	1	0	2	3	577	0	580	1013
% Approach Total	99.5	0.5	0.0		50.0	50.0	0.0		0.5	99.5	0.0		
PHF	0.901	0.500	0.000	0.905	0.250	0.250	0.000	0.500	0.750	0.919	0.000	0.918	0.956
Entering Leg	429	2	0	431	1	1	0	2	3	577	0	580	1013
Exiting Leg				578				5				430	1013
Total				1009				7				1010	2026

PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**



Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	3	0	0	3	0	0	0	0	0	4	0	4	7
4:15 PM	2	0	0	2	0	0	0	0	0	3	0	3	5
4:30 PM	3	0	0	3	0	0	0	0	0	2	0	2	5
4:45 PM	2	0	0	2	0	0	0	0	0	4	0	4	6
Total	10	0	0	10	0	0	0	0	0	13	0	13	23
5:00 PM	8	0	0	8	0	0	0	0	0	3	0	3	11
5:15 PM	1	0	0	1	0	0	0	0	0	3	0	3	4
5:30 PM	1	0	0	1	0	0	0	0	0	3	0	3	4
5:45 PM	4	0	0	4	0	0	0	0	0	2	0	2	6
Total	14	0	0	14	0	0	0	0	0	11	0	11	25
Grand Total	24	0	0	24	0	0	0	0	0	24	0	24	48
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	
Exiting Leg Total	24				0				24				48
Buses	16	0	0	16	0	0	0	0	0	18	0	18	34
% Buses	66.7	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	75.0	0.0	75.0	70.8
Exiting Leg Total	18				0				16				34
Single-Unit Trucks	6	0	0	6	0	0	0	0	0	5	0	5	11
% Single-Unit	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	20.8	0.0	20.8	22.9
Exiting Leg Total	5				0				6				11
Articulated Trucks	2	0	0	2	0	0	0	0	0	1	0	1	3
% Articulated	8.3	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	4.2	0.0	4.2	6.3
Exiting Leg Total	1				0				2				3

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:15 PM	2	0	0	2	0	0	0	0	0	3	0	3	5
4:30 PM	3	0	0	3	0	0	0	0	0	2	0	2	5
4:45 PM	2	0	0	2	0	0	0	0	0	4	0	4	6
5:00 PM	8	0	0	8	0	0	0	0	0	3	0	3	11
Total Volume	15	0	0	15	0	0	0	0	0	12	0	12	27
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.469	0.000	0.000	0.469	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.750	0.614
Buses	10	0	0	10	0	0	0	0	0	8	0	8	18
Buses %	66.7	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	66.7	0.0	66.7	66.7
Single-Unit Trucks	3	0	0	3	0	0	0	0	0	3	0	3	6
Single-Unit %	20.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	22.2
Articulated Trucks	2	0	0	2	0	0	0	0	0	1	0	1	3
Articulated %	13.3	0.0	0.0	13.3	0.0	0.0	0.0	0.0	0.0	8.3	0.0	8.3	11.1
Buses	10	0	0	10	0	0	0	0	0	8	0	8	18
Single-Unit Trucks	3	0	0	3	0	0	0	0	0	3	0	3	6
Articulated Trucks	2	0	0	2	0	0	0	0	0	1	0	1	3
Total Entering Leg	15	0	0	15	0	0	0	0	0	12	0	12	27
Buses				8				0				10	18
Single-Unit Trucks				3				0				3	6
Articulated Trucks				1				0				2	3
Total Exiting Leg				12				0				15	27

PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Buses

	Massachusetts Avenue					Pine Court					Massachusetts Avenue					Total
	from East					from South					from West					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	5
4:15 PM	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	5
4:30 PM	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	3
4:45 PM	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	4
Total	8	0	0	0	8	0	0	0	0	0	0	9	0	0	9	17
5:00 PM	4	0	0	0	4	0	0	0	0	0	0	2	0	0	2	6
5:15 PM	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	4
5:30 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	3
5:45 PM	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	4
Total	8	0	0	0	8	0	0	0	0	0	0	9	0	0	9	17
Grand Total	16	0	0	0	16	0	0	0	0	0	0	18	0	0	18	34
Approach %	100.0	0.0	0.0			0.0	0.0	0.0			0.0	100.0	0.0			
Total %	47.1	0.0	0.0	0.0	47.1	0.0	0.0	0.0	0.0	0.0	0.0	52.9	0.0	0.0	52.9	
Exiting Leg Total	18					0					16					34

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:15 PM	2	0	0	2	0	0	0	0	0	3	0	3	5
4:30 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
4:45 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
5:00 PM	4	0	0	4	0	0	0	0	0	2	0	2	6
Total Volume	10	0	0	10	0	0	0	0	0	8	0	8	18
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.667	0.000	0.667	0.750
Entering Leg	10	0	0	10	0	0	0	0	0	8	0	8	18
Exiting Leg				8				0				10	18
Total				18				0				18	36



PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**



Class: **Single-Unit Trucks**

	Massachusetts Avenue					Pine Court					Massachusetts Avenue					Total
	from East					from South					from West					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	1	0	0	1		0	0	0	0		0	1	0	1		2
4:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0
4:30 PM	1	0	0	1		0	0	0	0		0	0	0	0		1
4:45 PM	0	0	0	0		0	0	0	0		0	2	0	2		2
Total	2	0	0	2		0	0	0	0		0	3	0	3		5
5:00 PM	2	0	0	2		0	0	0	0		0	1	0	1		3
5:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0
5:30 PM	0	0	0	0		0	0	0	0		0	1	0	1		1
5:45 PM	2	0	0	2		0	0	0	0		0	0	0	0		2
Total	4	0	0	4		0	0	0	0		0	2	0	2		6
Grand Total	6	0	0	6		0	0	0	0		0	5	0	5		11
Approach %	100.0	0.0	0.0			0.0	0.0	0.0			0.0	100.0	0.0			
Total %	54.5	0.0	0.0	54.5		0.0	0.0	0.0	0.0		0.0	45.5	0.0	45.5		
Exiting Leg Total	5					0					6					11

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
5:00 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
Total Volume	3	0	0	3	0	0	0	0	0	3	0	3	6
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.375	0.500
Entering Leg	3	0	0	3	0	0	0	0	0	3	0	3	6
Exiting Leg				3								3	6
Total				6				0				6	12

PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Articulated Trucks

	Massachusetts Avenue					Pine Court					Massachusetts Avenue					Total
	from East					from South					from West					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
5:00 PM	2	0	0	2		0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2		0	0	0	0	0	0	0	0	0	0	2
Grand Total	2	0	0	2		0	0	0	0	0	0	1	0	1		3
Approach %	100.0	0.0	0.0			0.0	0.0	0.0			0.0	100.0	0.0			
Total %	66.7	0.0	0.0	66.7		0.0	0.0	0.0	0.0		0.0	33.3	0.0	33.3		
Exiting Leg Total	1					0					2					3

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Massachusetts Avenue				Pine Court				Massachusetts Avenue				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total Volume	2	0	0	2	0	0	0	0	0	1	0	1	3
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.375
Entering Leg	2	0	0	2	0	0	0	0	0	1	0	1	3
Exiting Leg				1				0				2	3
Total				3				0				3	

PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**



Class: **Bicycles (on Roadway and Crosswalks)**

	Massachusetts Avenue						Pine Court						Massachusetts Avenue						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	3
5:00 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	1
Grand Total	8	0	0	0	0	8	0	0	0	0	0	0	0	4	0	0	0	0	4
Approach %	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		
Total %	66.7	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	33.3	
Exiting Leg Total	4						0						8						12

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Massachusetts Avenue						Pine Court						Massachusetts Avenue						Total		
	from East						from South						from West								
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total			
5:00 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	2	
5:45 PM	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Total Volume	7	0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	1	8	
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0				
PHF	0.438	0.000	0.000	0.000	0.000	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.500		
Entering Leg	7	0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	1	8		
Exiting Leg	1						0						7						7	8	
Total	8						0						8						8	16	

PDI File #: **207450 DD**  
 Location: **S: Pine Court**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**



Count Date: **Tuesday, February 4, 2020**

Start Time: **4:00 PM**

End Time: **6:00 PM**

Class:

### Pedestrians

	Massachusetts Avenue							Pine Court							Massachusetts Avenue							Total
	from East							from South							from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total				
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	4	
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	3	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	3	4	7	0	0	0	0	0	0	0	7	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	2	
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	0	4	
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	0	0	0	0	0	5	3	8	0	0	0	0	0	0	0	8	
Grand Total	0	0	0	0	0	0	0	0	0	0	8	7	15	0	0	0	0	0	0	0	15	
Approach %	0	0	0	0	0	0	0	0	0	0	53.333	46.667		0	0	0	0	0	0			
Total %	0	0	0	0	0	0	0	0	0	0	53.333	46.667	100	0	0	0	0	0	0	0		
Exiting Leg Total	0							15							0							15

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Massachusetts Avenue						Pine Court						Massachusetts Avenue						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	5	3	8	0	0	0	0	0	0	8
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	62.5	37.5		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.375	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	0	0	0	0	0	5	3	8	0	0	0	0	0	0	8
Exiting Leg	0						8						8						8
Total	0						16						0						16



PDI File #: **207450 E**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class: **Cars and Heavy Vehicles (Combined)**



	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	1	94	0	95	110	4	0	114	209
7:15 AM	0	0	0	0	4	81	0	85	109	5	0	114	199
7:30 AM	1	0	0	1	2	135	0	137	124	2	0	126	264
7:45 AM	2	1	0	3	2	146	0	148	131	10	0	141	292
Total	3	1	0	4	9	456	0	465	474	21	0	495	964
8:00 AM	2	0	0	2	5	148	0	153	99	10	0	109	264
8:15 AM	2	2	0	4	1	102	0	103	98	5	0	103	210
8:30 AM	1	3	0	4	3	107	0	110	117	1	0	118	232
8:45 AM	2	3	0	5	4	127	0	131	109	3	0	112	248
Total	7	8	0	15	13	484	0	497	423	19	0	442	954
Grand Total	10	9	0	19	22	940	0	962	897	40	0	937	1918
Approach %	52.6	47.4	0.0		2.3	97.7	0.0		95.7	4.3	0.0		
Total %	0.5	0.5	0.0	1.0	1.1	49.0	0.0	50.2	46.8	2.1	0.0	48.9	
Exiting Leg Total	62				906				950				1918
Cars	9	9	0	18	21	880	0	901	829	38	0	867	1786
% Cars	90.0	100.0	0.0	94.7	95.5	93.6	0.0	93.7	92.4	95.0	0.0	92.5	93.1
Exiting Leg Total	59				838				889				1786
Heavy Vehicles	1	0	0	1	1	60	0	61	68	2	0	70	132
% Heavy Vehicles	10.0	0.0	0.0	5.3	4.5	6.4	0.0	6.3	7.6	5.0	0.0	7.5	6.9
Exiting Leg Total	3				68				61				132

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Quinn Road (Mirak Mill Park East Driveway)					Massachusetts Avenue				Massachusetts Avenue				Total
	from North					from East				from West				
	Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:30 AM	1	0	0	1		2	135	0	137	124	2	0	126	264
7:45 AM	2	1	0	3		2	146	0	148	131	10	0	141	292
8:00 AM	2	0	0	2		5	148	0	153	99	10	0	109	264
8:15 AM	2	2	0	4		1	102	0	103	98	5	0	103	210
Total Volume	7	3	0	10		10	531	0	541	452	27	0	479	1030
% Approach Total	70.0	30.0	0.0			1.8	98.2	0.0		94.4	5.6	0.0		
PHF	0.875	0.375	0.000	0.625		0.500	0.897	0.000	0.884	0.863	0.675	0.000	0.849	0.882
Cars	6	3	0	9		10	505	0	515	415	26	0	441	965
Cars %	85.7	100.0	0.0	90.0		100.0	95.1	0.0	95.2	91.8	96.3	0.0	92.1	93.7
Heavy Vehicles	1	0	0	1		0	26	0	26	37	1	0	38	65
Heavy Vehicles %	14.3	0.0	0.0	10.0		0.0	4.9	0.0	4.8	8.2	3.7	0.0	7.9	6.3
Cars Enter Leg	6	3	0	9		10	505	0	515	415	26	0	441	965
Heavy Enter Leg	1	0	0	1		0	26	0	26	37	1	0	38	65
Total Entering Leg	7	3	0	10		10	531	0	541	452	27	0	479	1030
Cars Exiting Leg				36					418				511	965
Heavy Exiting Leg				1					37				27	65
Total Exiting Leg				37					455				538	1030

PDI File #: **207450 E**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars

	Quinn Road (Mirak Mill Park East Driveway)					Massachusetts Avenue				Massachusetts Avenue				Total
	from North					from East				from West				
	Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	1	83	0	84	98	3	0	101	185
7:15 AM	0	0	0	0	0	3	74	0	77	103	5	0	108	185
7:30 AM	0	0	0	0	0	2	127	0	129	114	2	0	116	245
7:45 AM	2	1	0	3	0	2	140	0	142	121	10	0	131	276
Total	2	1	0	3	0	8	424	0	432	436	20	0	456	891
8:00 AM	2	0	0	2	0	5	141	0	146	92	10	0	102	250
8:15 AM	2	2	0	4	0	1	97	0	98	88	4	0	92	194
8:30 AM	1	3	0	4	0	3	98	0	101	111	1	0	112	217
8:45 AM	2	3	0	5	0	4	120	0	124	102	3	0	105	234
Total	7	8	0	15	0	13	456	0	469	393	18	0	411	895
Grand Total	9	9	0	18	0	21	880	0	901	829	38	0	867	1786
Approach %	50.0	50.0	0.0			2.3	97.7	0.0		95.6	4.4	0.0		
Total %	0.5	0.5	0.0	1.0		1.2	49.3	0.0	50.4	46.4	2.1	0.0	48.5	
Exiting Leg Total	59					838				889				1786

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:30 AM	0	0	0	0	2	127	0	129	114	2	0	116	245
7:45 AM	2	1	0	3	2	140	0	142	121	10	0	131	276
8:00 AM	2	0	0	2	5	141	0	146	92	10	0	102	250
8:15 AM	2	2	0	4	1	97	0	98	88	4	0	92	194
Total Volume	6	3	0	9	10	505	0	515	415	26	0	441	965
% Approach Total	66.7	33.3	0.0		1.9	98.1	0.0		94.1	5.9	0.0		
PHF	0.750	0.375	0.000	0.563	0.500	0.895	0.000	0.882	0.857	0.650	0.000	0.842	0.874
Entering Leg	6	3	0	9	10	505	0	515	415	26	0	441	965
Exiting Leg				36				418				511	965
Total				45				933				952	1930

PDI File #: **207450 E**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**



	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	11	0	11	12	1	0	13	24
7:15 AM	0	0	0	0	1	7	0	8	6	0	0	6	14
7:30 AM	1	0	0	1	0	8	0	8	10	0	0	10	19
7:45 AM	0	0	0	0	0	6	0	6	10	0	0	10	16
Total	1	0	0	1	1	32	0	33	38	1	0	39	73
8:00 AM	0	0	0	0	0	7	0	7	7	0	0	7	14
8:15 AM	0	0	0	0	0	5	0	5	10	1	0	11	16
8:30 AM	0	0	0	0	0	9	0	9	6	0	0	6	15
8:45 AM	0	0	0	0	0	7	0	7	7	0	0	7	14
Total	0	0	0	0	0	28	0	28	30	1	0	31	59
Grand Total	1	0	0	1	1	60	0	61	68	2	0	70	132
Approach %	100.0	0.0	0.0		1.6	98.4	0.0		97.1	2.9	0.0		
Total %	0.8	0.0	0.0	0.8	0.8	45.5	0.0	46.2	51.5	1.5	0.0	53.0	
Exiting Leg Total	3				68				61				132
Buses	0	0	0	0	0	24	0	24	21	0	0	21	45
% Buses	0.0	0.0	0.0	0.0	0.0	40.0	0.0	39.3	30.9	0.0	0.0	30.0	34.1
Exiting Leg Total	0				21				24				45
Single-Unit Trucks	1	0	0	1	1	34	0	35	41	2	0	43	79
% Single-Unit	100.0	0.0	0.0	100.0	100.0	56.7	0.0	57.4	60.3	100.0	0.0	61.4	59.8
Exiting Leg Total	3				41				35				79
Articulated Trucks	0	0	0	0	0	2	0	2	6	0	0	6	8
% Articulated	0.0	0.0	0.0	0.0	0.0	3.3	0.0	3.3	8.8	0.0	0.0	8.6	6.1
Exiting Leg Total	0				6				2				8

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	11	0	11	12	1	0	13	24
7:15 AM	0	0	0	0	1	7	0	8	6	0	0	6	14
7:30 AM	1	0	0	1	0	8	0	8	10	0	0	10	19
7:45 AM	0	0	0	0	0	6	0	6	10	0	0	10	16
Total Volume	1	0	0	1	1	32	0	33	38	1	0	39	73
% Approach Total	100.0	0.0	0.0		3.0	97.0	0.0		97.4	2.6	0.0		
PHF	0.250	0.000	0.000	0.250	0.250	0.727	0.000	0.750	0.792	0.250	0.000	0.750	0.760
Buses	0	0	0	0	0	15	0	15	9	0	0	9	24
Buses %	0.0	0.0	0.0	0.0	0.0	46.9	0.0	45.5	23.7	0.0	0.0	23.1	32.9
Single-Unit Trucks	1	0	0	1	1	16	0	17	24	1	0	25	43
Single-Unit %	100.0	0.0	0.0	100.0	100.0	50.0	0.0	51.5	63.2	100.0	0.0	64.1	58.9
Articulated Trucks	0	0	0	0	0	1	0	1	5	0	0	5	6
Articulated %	0.0	0.0	0.0	0.0	0.0	3.1	0.0	3.0	13.2	0.0	0.0	12.8	8.2
Buses	0	0	0	0	0	15	0	15	9	0	0	9	24
Single-Unit Trucks	1	0	0	1	1	16	0	17	24	1	0	25	43
Articulated Trucks	0	0	0	0	0	1	0	1	5	0	0	5	6
Total Entering Leg	1	0	0	1	1	32	0	33	38	1	0	39	73
Buses				0				9				15	24
Single-Unit Trucks				2				24				17	43
Articulated Trucks				0				5				1	6
Total Exiting Leg				2				38				33	73

PDI File #: **207450 E**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Buses

	Quinn Road (Mirak Mill Park East Driveway)					Massachusetts Avenue				Massachusetts Avenue				Total
	from North					from East				from West				
	Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	5	0	5	4	0	0	4	9
7:15 AM	0	0	0	0	0	0	4	0	4	2	0	0	2	6
7:30 AM	0	0	0	0	0	0	3	0	3	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	3	0	3	3	0	0	3	6
Total	0	0	0	0	0	0	15	0	15	9	0	0	9	24
8:00 AM	0	0	0	0	0	0	3	0	3	4	0	0	4	7
8:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	4	4
8:30 AM	0	0	0	0	0	0	3	0	3	2	0	0	2	5
8:45 AM	0	0	0	0	0	0	3	0	3	2	0	0	2	5
Total	0	0	0	0	0	0	9	0	9	12	0	0	12	21
Grand Total	0	0	0	0	0	0	24	0	24	21	0	0	21	45
Approach %	0.0	0.0	0.0			0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0		0.0	53.3	0.0	53.3	46.7	0.0	0.0	46.7	
Exiting Leg Total	0					21				24				45

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	5	0	5	4	0	0	4	9
7:15 AM	0	0	0	0	0	4	0	4	2	0	0	2	6
7:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	3
7:45 AM	0	0	0	0	0	3	0	3	3	0	0	3	6
Total Volume	0	0	0	0	0	15	0	15	9	0	0	9	24
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.750	0.563	0.000	0.000	0.563	0.667
Entering Leg	0	0	0	0	0	15	0	15	9	0	0	9	24
Exiting Leg				0				9				15	24
Total				0				24				24	48



PDI File #: **207450 E**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Single-Unit Trucks

	Quinn Road (Mirak Mill Park East Driveway)					Massachusetts Avenue				Massachusetts Avenue				Total
	from North					from East				from West				
	Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	6	0	6	6	1	0	7	13
7:15 AM	0	0	0	0	0	1	3	0	4	3	0	0	3	7
7:30 AM	1	0	0	1	0	5	0	5	9	0	0	9	15	
7:45 AM	0	0	0	0	0	0	2	0	2	6	0	0	6	8
Total	1	0	0	1	1	16	0	17	24	1	0	25	43	
8:00 AM	0	0	0	0	0	0	4	0	4	3	0	0	3	7
8:15 AM	0	0	0	0	0	0	4	0	4	5	1	0	6	10
8:30 AM	0	0	0	0	0	0	6	0	6	4	0	0	4	10
8:45 AM	0	0	0	0	0	0	4	0	4	5	0	0	5	9
Total	0	0	0	0	0	0	18	0	18	17	1	0	18	36
Grand Total	1	0	0	1	1	34	0	35	41	2	0	43	79	
Approach %	100.0	0.0	0.0		2.9	97.1	0.0		95.3	4.7	0.0			
Total %	1.3	0.0	0.0	1.3	1.3	43.0	0.0	44.3	51.9	2.5	0.0	54.4		
Exiting Leg Total	3					41				35				79

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	6	0	6	6	1	0	7	13
7:15 AM	0	0	0	0	1	3	0	4	3	0	0	3	7
7:30 AM	1	0	0	1	0	5	0	5	9	0	0	9	15
7:45 AM	0	0	0	0	0	2	0	2	6	0	0	6	8
Total Volume	1	0	0	1	1	16	0	17	24	1	0	25	43
% Approach Total	100.0	0.0	0.0		5.9	94.1	0.0		96.0	4.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.250	0.667	0.000	0.708	0.667	0.250	0.000	0.694	0.717
Entering Leg	1	0	0	1	1	16	0	17	24	1	0	25	43
Exiting Leg				2				24				17	43
Total				3				41				42	86

PDI File #: **207450 E**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Articulated Trucks

	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total	0	0	0	0	0	1	0	1	5	0	0	5	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	1	0	0	1	2
Grand Total	0	0	0	0	0	2	0	2	6	0	0	6	8
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	75.0	0.0	0.0	75.0	
Exiting Leg Total	0				6				2				8

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total Volume	0	0	0	0	0	1	0	1	5	0	0	5	6
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.625	0.000	0.000	0.625	0.750
Entering Leg	0	0	0	0	0	1	0	1	5	0	0	5	6
Exiting Leg				0				5				1	6
Total				0				6				6	12

PDI File #: 207450 E  
 Location: N: Quinn Road (Mirak Mill Park East Driveway)  
 Location: E: Massachusetts Avenue W: Massachusetts Avenue  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 7:00 AM  
 End Time: 9:00 AM



Class: Bicycles (on Roadway and Crosswalks)

	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	3	1	0	0	0	0	0	1	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	3	0	0	0	3	1	0	0	0	0	0	1	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0	0	0	0	3	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	1	4	0	0	0	0	0	4	5
Grand Total	0	0	0	0	0	0	0	4	0	0	0	4	5	0	0	0	0	0	5	9
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.4	0.0	0.0	0.0	44.4	55.6	0.0	0.0	0.0	0.0		55.6	
Exiting Leg Total	0						5						4						9	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	3	1	0	0	0	0	0	1	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	3	0	0	0	3	2	0	0	0	0	0	2	5
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.500		0.313
Entering Leg	0	0	0	0	0	0	0	3	0	0	0	3	2	0	0	0	0	2		5
Exiting Leg	0						2						3						5	
Total	0						5						5						10	

PDI File #: 207450 E  
 Location: N: Quinn Road (Mirak Mill Park East Driveway)  
 Location: E: Massachusetts Avenue W: Massachusetts Avenue  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 7:00 AM  
 End Time: 9:00 AM  
 Class:



### Pedestrians

	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	7	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	4	4	8	0	0	0	1	0	1	0	0	0	0	0	0	0	9
Grand Total	0	0	0	11	7	18	0	0	0	1	0	1	0	0	0	0	0	0	0	19
Approach %	0	0	0	61.111	38.889		0	0	0	100	0		0	0	0	0	0			
Total %	0	0	0	57.895	36.842	94.737	0	0	0	5.2632	0	5.2632	0	0	0	0	0	0	0	
Exiting Leg Total	18						1						0						19	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	7	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
% Approach Total	0.0	0.0	0.0	70.0	30.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.583	0.250	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
Entering Leg	0	0	0	7	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Exiting Leg	10						0						0						10	
Total	20						0						0						20	



PDI File #: **207450 EE**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class: **Cars and Heavy Vehicles (Combined)**



	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	7	1	0	8	1	113	0	114	123	3	0	126	248
4:15 PM	1	3	0	4	1	96	0	97	118	2	0	120	221
4:30 PM	9	1	0	10	1	102	0	103	125	2	0	127	240
4:45 PM	3	1	0	4	0	112	0	112	145	3	0	148	264
Total	20	6	0	26	3	423	0	426	511	10	0	521	973
5:00 PM	10	6	0	16	1	114	0	115	130	2	0	132	263
5:15 PM	4	1	0	5	2	95	0	97	151	0	0	151	253
5:30 PM	2	5	0	7	2	97	0	99	159	1	0	160	266
5:45 PM	3	1	0	4	0	120	0	120	143	1	0	144	268
Total	19	13	0	32	5	426	0	431	583	4	0	587	1050
Grand Total	39	19	0	58	8	849	0	857	1094	14	0	1108	2023
Approach %	67.2	32.8	0.0		0.9	99.1	0.0		98.7	1.3	0.0		
Total %	1.9	0.9	0.0	2.9	0.4	42.0	0.0	42.4	54.1	0.7	0.0	54.8	
Exiting Leg Total	22				1113				888				2023
Cars	38	19	0	57	8	826	0	834	1071	14	0	1085	1976
% Cars	97.4	100.0	0.0	98.3	100.0	97.3	0.0	97.3	97.9	100.0	0.0	97.9	97.7
Exiting Leg Total	22				1090				864				1976
Heavy Vehicles	1	0	0	1	0	23	0	23	23	0	0	23	47
% Heavy Vehicles	2.6	0.0	0.0	1.7	0.0	2.7	0.0	2.7	2.1	0.0	0.0	2.1	2.3
Exiting Leg Total	0				23				24				47

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Quinn Road (Mirak Mill Park East Driveway)					Massachusetts Avenue				Massachusetts Avenue					Total
	from North					from East				from West					
	Right	Left	U-Turn		Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total		
5:00 PM	10	6	0		16	1	114	0	115	130	2	0	132	263	
5:15 PM	4	1	0		5	2	95	0	97	151	0	0	151	253	
5:30 PM	2	5	0		7	2	97	0	99	159	1	0	160	266	
5:45 PM	3	1	0		4	0	120	0	120	143	1	0	144	268	
Total Volume	19	13	0		32	5	426	0	431	583	4	0	587	1050	
% Approach Total	59.4	40.6	0.0			1.2	98.8	0.0		99.3	0.7	0.0			
PHF	0.475	0.542	0.000	0.500		0.625	0.888	0.000	0.898	0.917	0.500	0.000	0.917	0.979	
Cars	18	13	0		31	5	414	0	419	573	4	0	577	1027	
Cars %	94.7	100.0	0.0	96.9		100.0	97.2	0.0	97.2	98.3	100.0	0.0	98.3	97.8	
Heavy Vehicles	1	0	0		1	0	12	0	12	10	0	0	10	23	
Heavy Vehicles %	5.3	0.0	0.0	3.1		0.0	2.8	0.0	2.8	1.7	0.0	0.0	1.7	2.2	
Cars Enter Leg	18	13	0		31	5	414	0	419	573	4	0	577	1027	
Heavy Enter Leg	1	0	0		1	0	12	0	12	10	0	0	10	23	
Total Entering Leg	19	13	0		32	5	426	0	431	583	4	0	587	1050	
Cars Exiting Leg					9				586				432	1027	
Heavy Exiting Leg					0				10				13	23	
Total Exiting Leg					9				596				445	1050	

PDI File #: **207450 EE**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars

	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	7	1	0	8	1	110	0	111	119	3	0	122	241
4:15 PM	1	3	0	4	1	94	0	95	115	2	0	117	216
4:30 PM	9	1	0	10	1	98	0	99	123	2	0	125	234
4:45 PM	3	1	0	4	0	110	0	110	141	3	0	144	258
Total	20	6	0	26	3	412	0	415	498	10	0	508	949
5:00 PM	9	6	0	15	1	107	0	108	128	2	0	130	253
5:15 PM	4	1	0	5	2	94	0	96	148	0	0	148	249
5:30 PM	2	5	0	7	2	96	0	98	156	1	0	157	262
5:45 PM	3	1	0	4	0	117	0	117	141	1	0	142	263
Total	18	13	0	31	5	414	0	419	573	4	0	577	1027
Grand Total	38	19	0	57	8	826	0	834	1071	14	0	1085	1976
Approach %	66.7	33.3	0.0		1.0	99.0	0.0		98.7	1.3	0.0		
Total %	1.9	1.0	0.0	2.9	0.4	41.8	0.0	42.2	54.2	0.7	0.0	54.9	
Exiting Leg Total	22				1090				864				1976

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
5:00 PM	9	6	0	15	1	107	0	108	128	2	0	130	253
5:15 PM	4	1	0	5	2	94	0	96	148	0	0	148	249
5:30 PM	2	5	0	7	2	96	0	98	156	1	0	157	262
5:45 PM	3	1	0	4	0	117	0	117	141	1	0	142	263
Total Volume	18	13	0	31	5	414	0	419	573	4	0	577	1027
% Approach Total	58.1	41.9	0.0		1.2	98.8	0.0		99.3	0.7	0.0		
PHF	0.500	0.542	0.000	0.517	0.625	0.885	0.000	0.895	0.918	0.500	0.000	0.919	0.976
Entering Leg	18	13	0	31	5	414	0	419	573	4	0	577	1027
Exiting Leg				9				586				432	1027
Total				40				1005				1009	2054

PDI File #: **207450 EE**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**



	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	3	0	3	4	0	0	4	7
4:15 PM	0	0	0	0	0	2	0	2	3	0	0	3	5
4:30 PM	0	0	0	0	0	4	0	4	2	0	0	2	6
4:45 PM	0	0	0	0	0	2	0	2	4	0	0	4	6
Total	0	0	0	0	0	11	0	11	13	0	0	13	24
5:00 PM	1	0	0	1	0	7	0	7	2	0	0	2	10
5:15 PM	0	0	0	0	0	1	0	1	3	0	0	3	4
5:30 PM	0	0	0	0	0	1	0	1	3	0	0	3	4
5:45 PM	0	0	0	0	0	3	0	3	2	0	0	2	5
Total	1	0	0	1	0	12	0	12	10	0	0	10	23
Grand Total	1	0	0	1	0	23	0	23	23	0	0	23	47
Approach %	100.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	2.1	0.0	0.0	2.1	0.0	48.9	0.0	48.9	48.9	0.0	0.0	48.9	
Exiting Leg Total	0				23				24				47
Buses	0	0	0	0	0	16	0	16	18	0	0	18	34
% Buses	0.0	0.0	0.0	0.0	0.0	69.6	0.0	69.6	78.3	0.0	0.0	78.3	72.3
Exiting Leg Total	0				18				16				34
Single-Unit Trucks	0	0	0	0	0	6	0	6	4	0	0	4	10
% Single-Unit	0.0	0.0	0.0	0.0	0.0	26.1	0.0	26.1	17.4	0.0	0.0	17.4	21.3
Exiting Leg Total	0				4				6				10
Articulated Trucks	1	0	0	1	0	1	0	1	1	0	0	1	3
% Articulated	100.0	0.0	0.0	100.0	0.0	4.3	0.0	4.3	4.3	0.0	0.0	4.3	6.4
Exiting Leg Total	0				1				2				3

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:15 PM	0	0	0	0	0	2	0	2	3	0	0	3	5
4:30 PM	0	0	0	0	0	4	0	4	2	0	0	2	6
4:45 PM	0	0	0	0	0	2	0	2	4	0	0	4	6
5:00 PM	1	0	0	1	0	7	0	7	2	0	0	2	10
Total Volume	1	0	0	1	0	15	0	15	11	0	0	11	27
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.000	0.536	0.000	0.536	0.688	0.000	0.000	0.688	0.675
Buses	0	0	0	0	0	10	0	10	8	0	0	8	18
Buses %	0.0	0.0	0.0	0.0	0.0	66.7	0.0	66.7	72.7	0.0	0.0	72.7	66.7
Single-Unit Trucks	0	0	0	0	0	4	0	4	2	0	0	2	6
Single-Unit %	0.0	0.0	0.0	0.0	0.0	26.7	0.0	26.7	18.2	0.0	0.0	18.2	22.2
Articulated Trucks	1	0	0	1	0	1	0	1	1	0	0	1	3
Articulated %	100.0	0.0	0.0	100.0	0.0	6.7	0.0	6.7	9.1	0.0	0.0	9.1	11.1
Buses	0	0	0	0	0	10	0	10	8	0	0	8	18
Single-Unit Trucks	0	0	0	0	0	4	0	4	2	0	0	2	6
Articulated Trucks	1	0	0	1	0	1	0	1	1	0	0	1	3
Total Entering Leg	1	0	0	1	0	15	0	15	11	0	0	11	27
Buses				0				8				10	18
Single-Unit Trucks				0				2				4	6
Articulated Trucks				0				1				2	3
Total Exiting Leg				0				11				16	27

PDI File #: **207450 EE**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Buses

	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	2	0	2	3	0	0	3	5
4:15 PM	0	0	0	0	0	2	0	2	3	0	0	3	5
4:30 PM	0	0	0	0	0	2	0	2	1	0	0	1	3
4:45 PM	0	0	0	0	0	2	0	2	2	0	0	2	4
Total	0	0	0	0	0	8	0	8	9	0	0	9	17
5:00 PM	0	0	0	0	0	4	0	4	2	0	0	2	6
5:15 PM	0	0	0	0	0	1	0	1	3	0	0	3	4
5:30 PM	0	0	0	0	0	1	0	1	2	0	0	2	3
5:45 PM	0	0	0	0	0	2	0	2	2	0	0	2	4
Total	0	0	0	0	0	8	0	8	9	0	0	9	17
Grand Total	0	0	0	0	0	16	0	16	18	0	0	18	34
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	47.1	0.0	47.1	52.9	0.0	0.0	52.9	
Exiting Leg Total	0				18				16				34

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:15 PM	0	0	0	0	0	2	0	2	3	0	0	3	5
4:30 PM	0	0	0	0	0	2	0	2	1	0	0	1	3
4:45 PM	0	0	0	0	0	2	0	2	2	0	0	2	4
5:00 PM	0	0	0	0	0	4	0	4	2	0	0	2	6
Total Volume	0	0	0	0	0	10	0	10	8	0	0	8	18
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.625	0.667	0.000	0.000	0.667	0.750
Entering Leg	0	0	0	0	0	10	0	10	8	0	0	8	18
Exiting Leg				0				8				10	18
Total				0				18				18	36

PDI File #: **207450 EE**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Single-Unit Trucks

	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	3	0	3	3	0	0	3	6
5:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
5:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	3	0	3	1	0	0	1	4
Grand Total	0	0	0	0	0	6	0	6	4	0	0	4	10
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	60.0	0.0	60.0	40.0	0.0	0.0	40.0	
Exiting Leg Total	0				4				6				10

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
Total Volume	0	0	0	0	0	3	0	3	3	0	0	3	6
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.375	0.375	0.000	0.000	0.375	0.750
Entering Leg	0	0	0	0	0	3	0	3	3	0	0	3	6
Exiting Leg				0				3				3	6
Total				0				6				6	12



PDI File #: **207450 EE**  
 Location: **N: Quinn Road (Mirak Mill Park East Driveway)**  
 Location: **E: Massachusetts Avenue W: Massachusetts Avenue**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Articulated Trucks

	Quinn Road (Mirak Mill Park East Driveway)					Massachusetts Avenue				Massachusetts Avenue				Total
	from North					from East				from West				
	Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	1	0	1	0	0	0	0	0	2
Grand Total	1	0	0	1	0	1	0	1	1	0	0	1	3	
Approach %	100.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0			
Total %	33.3	0.0	0.0	33.3	0.0	33.3	0.0	33.3	33.3	0.0	0.0	33.3		
Exiting Leg Total	0					1				2				3

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Quinn Road (Mirak Mill Park East Driveway)				Massachusetts Avenue				Massachusetts Avenue				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	2
Total Volume	1	0	0	1	0	1	0	1	1	0	0	1	3
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.250	0.375
Entering Leg	1	0	0	1	0	1	0	1	1	0	0	1	3
Exiting Leg				0				1				2	3
Total				1				2				3	

PDI File #: 207450 EE  
 Location: N: Quinn Road (Mirak Mill Park East Driveway)  
 Location: E: Massachusetts Avenue W: Massachusetts Avenue  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD



Count Date: Tuesday, February 4, 2020  
 Start Time: 4:00 PM  
 End Time: 6:00 PM

Class: Bicycles (on Roadway and Crosswalks)

	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	0	0	2	3
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	4	0	0	0	4	2	0	0	0	0	0	2	6
Total	0	0	0	0	0	0	0	7	0	0	0	7	2	0	0	0	0	0	2	9
Grand Total	0	0	0	0	0	0	0	8	0	0	0	8	4	0	0	0	0	0	4	12
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.0	33.3		
Exiting Leg Total	0						4						8						12	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	4	0	0	0	4	2	0	0	0	0	2	6
Total Volume	0	0	0	0	0	0	0	7	0	0	0	7	2	0	0	0	0	2	9
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.438	0.000	0.000	0.000	0.438	0.250	0.000	0.000	0.000	0.000	0.250	0.375
Entering Leg	0	0	0	0	0	0	0	7	0	0	0	7	2	0	0	0	0	2	9
Exiting Leg	0						2						7						9
Total	0						9						9						18

PDI File #: 207450 EE  
 Location: N: Quinn Road (Mirak Mill Park East Driveway)  
 Location: E: Massachusetts Avenue W: Massachusetts Avenue  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 4:00 PM  
 End Time: 6:00 PM  
 Class:



### Pedestrians

	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
4:30 PM	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	4	4	8	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	0	0	0	7	7	14	0	0	0	0	0	0	0	0	0	0	1	1	15
5:00 PM	0	0	0	4	3	7	0	0	0	0	0	0	0	0	0	0	0	0	7
5:15 PM	0	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	0	3
5:30 PM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	0	0	0	11	6	17	0	0	0	0	0	1	1	0	0	0	0	0	18
Grand Total	0	0	0	18	13	31	0	0	0	0	0	1	1	0	0	0	0	1	33
Approach %	0	0	0	58.065	41.935		0	0	0	0	0	100		0	0	0	0	100	
Total %	0	0	0	54.545	39.394	93.939	0	0	0	0	0	3.0303	3.0303	0	0	0	0	3.0303	3.0303
Exiting Leg Total	31						1						1						33

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Quinn Road (Mirak Mill Park East Driveway)						Massachusetts Avenue						Massachusetts Avenue						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:30 PM	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	4	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
5:00 PM	0	0	0	4	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:15 PM	0	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	0	0	3
Total Volume	0	0	0	9	11	20	0	0	0	0	1	1	0	0	0	0	0	0	0	21
% Approach Total	0.0	0.0	0.0	45.0	55.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.563	0.688	0.625	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000		0.656
Entering Leg	0	0	0	9	11	20	0	0	0	0	1	1	0	0	0	0	0	0	0	21
Exiting Leg	20						1						0						21	
Total	40						2						0						42	

PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	1	0	1	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	4
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
7:30 AM	0	0	1	0	1	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	8
7:45 AM	0	2	2	1	5	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	11
Total	0	3	4	1	8	1	0	1	0	2	3	14	0	0	17	1	0	0	0	1	28
8:00 AM	0	0	1	0	1	0	0	1	0	1	2	3	0	0	5	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	0	0	1	0	1	4	6	1	0	11	0	0	0	0	0	12
8:30 AM	0	0	1	0	1	0	0	0	0	0	2	3	0	0	5	0	0	0	0	0	6
8:45 AM	0	2	0	0	2	0	0	1	0	1	6	1	0	0	7	0	0	0	0	0	10
Total	0	2	2	0	4	0	0	3	0	3	14	13	1	0	28	0	0	0	0	0	35
Grand Total	0	5	6	1	12	1	0	4	0	5	17	27	1	0	45	1	0	0	0	1	63
Approach %	0.0	41.7	50.0	8.3		20.0	0.0	80.0	0.0		37.8	60.0	2.2	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	7.9	9.5	1.6	19.0	1.6	0.0	6.3	0.0	7.9	27.0	42.9	1.6	0.0	71.4	1.6	0.0	0.0	0.0	1.6	
Exiting Leg Total	29					23					10					1					63
Cars	0	5	6	0	11	1	0	4	0	5	17	27	1	0	45	1	0	0	0	1	62
% Cars	0.0	100.0	100.0	0.0	91.7	100.0	0.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	0.0	0.0	0.0	100.0	98.4
Exiting Leg Total	28					23					10					1					62
Heavy Vehicles	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0.0	0.0	0.0	100.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Exiting Leg Total	1					0					0					0					1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:30 AM	0	0	1	0	1	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	8
7:45 AM	0	2	2	1	5	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	11
8:00 AM	0	0	1	0	1	0	0	1	0	1	2	3	0	0	5	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	0	0	1	0	1	4	6	1	0	11	0	0	0	0	0	12
Total Volume	0	2	4	1	7	1	0	2	0	3	8	18	1	0	27	1	0	0	0	1	38
% Approach Total	0.0	28.6	57.1	14.3		33.3	0.0	66.7	0.0		29.6	66.7	3.7	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.500	0.250	0.350	0.250	0.000	0.500	0.000	0.750	0.500	0.750	0.250	0.000	0.614	0.250	0.000	0.000	0.000	0.250	0.792
Cars	0	2	4	0	6	1	0	2	0	3	8	18	1	0	27	1	0	0	0	1	37
Cars %	0.0	100.0	100.0	0.0	85.7	100.0	0.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	0.0	0.0	0.0	100.0	97.4
Heavy Vehicles	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Heavy Vehicles %	0.0	0.0	0.0	100.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Cars Enter Leg	0	2	4	0	6	1	0	2	0	3	8	18	1	0	27	1	0	0	0	1	37
Heavy Enter Leg	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Entering Leg	0	2	4	1	7	1	0	2	0	3	8	18	1	0	27	1	0	0	0	1	38
Cars Exiting Leg	19					12					5					1					37
Heavy Exiting Leg	1					0					0					0					1
Total Exiting Leg	20					12					5					1					38

PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	1	0	1	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	4
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
7:30 AM	0	0	1	0	1	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	8
7:45 AM	0	2	2	0	4	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	10
Total	0	3	4	0	7	1	0	1	0	2	3	14	0	0	17	1	0	0	0	1	27
8:00 AM	0	0	1	0	1	0	0	1	0	1	2	3	0	0	5	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	0	0	1	0	1	4	6	1	0	11	0	0	0	0	0	12
8:30 AM	0	0	1	0	1	0	0	0	0	0	2	3	0	0	5	0	0	0	0	0	6
8:45 AM	0	2	0	0	2	0	0	1	0	1	6	1	0	0	7	0	0	0	0	0	10
Total	0	2	2	0	4	0	0	3	0	3	14	13	1	0	28	0	0	0	0	0	35
Grand Total	0	5	6	0	11	1	0	4	0	5	17	27	1	0	45	1	0	0	0	1	62
Approach %	0.0	45.5	54.5	0.0		20.0	0.0	80.0	0.0		37.8	60.0	2.2	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	8.1	9.7	0.0	17.7	1.6	0.0	6.5	0.0	8.1	27.4	43.5	1.6	0.0	72.6	1.6	0.0	0.0	0.0	1.6	
Exiting Leg Total	28					23					10					1					62

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:30 AM	0	0	1	0	1	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	8
7:45 AM	0	2	2	0	4	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	10
8:00 AM	0	0	1	0	1	0	0	1	0	1	2	3	0	0	5	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	0	0	1	0	1	4	6	1	0	11	0	0	0	0	0	12
Total Volume	0	2	4	0	6	1	0	2	0	3	8	18	1	0	27	1	0	0	0	1	37
% Approach Total	0.0	33.3	66.7	0.0		33.3	0.0	66.7	0.0		29.6	66.7	3.7	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.500	0.000	0.375	0.250	0.000	0.500	0.000	0.750	0.500	0.750	0.250	0.000	0.614	0.250	0.000	0.000	0.000	0.250	0.771
Entering Leg	0	2	4	0	6	1	0	2	0	3	8	18	1	0	27	1	0	0	0	1	37
Exiting Leg	19					12					5					1					37
Total	25					15					32					2					74



PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**



	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	1					0					0					0					1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0					0					0					0					0
Single-Unit Trucks	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Single-Unit	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Exiting Leg Total	1					0					0					0					1
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0					0					0					0					0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single-Unit Trucks	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Single-Unit %	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single-Unit Trucks	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Buses	0					0					0					0					0
Single-Unit Trucks	1					0					0					0					1
Articulated Trucks	0					0					0					0					0
Total Exiting Leg	1					0					0					0					1

PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Buses

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					0					0					0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0					0					0					0					0
Total	0					0					0					0					0

PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Single-Unit Trucks

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	1					0					0					0					1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg	1					0					0					0					1
Total	2					0					0					0					2

PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Articulated Trucks

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					0					0					0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0					0					0					0					0
Total	0					0					0					0					0

PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot								
	from North							from East							from South							from West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0							0							0							0							0	
Total	0							0							0							0							0	



PDI File #: **207450 F**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



**Pedestrians**

	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg	0							0							0							0							0
Total	0							0							0							0							0

PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	3	0	0	3	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	7
4:15 PM	0	1	0	0	1	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	5
4:30 PM	0	7	0	0	7	0	0	1	0	1	3	1	0	0	4	0	0	0	0	0	12
4:45 PM	0	5	0	0	5	0	0	4	0	4	1	0	0	0	1	0	0	0	0	0	10
Total	0	16	0	0	16	0	0	9	0	9	6	3	0	0	9	0	0	0	0	0	34
5:00 PM	0	7	0	0	7	0	0	3	0	3	1	1	0	0	2	1	0	0	0	1	13
5:15 PM	0	1	0	0	1	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	5
5:30 PM	0	4	0	0	4	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	6
5:45 PM	0	2	0	0	2	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	6
Total	0	14	0	0	14	0	0	7	0	7	2	4	1	0	7	2	0	0	0	2	30
Grand Total	0	30	0	0	30	0	0	16	0	16	8	7	1	0	16	2	0	0	0	2	64
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		50.0	43.8	6.3	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	46.9	0.0	0.0	46.9	0.0	0.0	25.0	0.0	25.0	12.5	10.9	1.6	0.0	25.0	3.1	0.0	0.0	0.0	3.1	
Exiting Leg Total	7					8					48					1					64
Cars	0	29	0	0	29	0	0	16	0	16	8	7	1	0	16	2	0	0	0	2	63
% Cars	0.0	96.7	0.0	0.0	96.7	0.0	0.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	0.0	0.0	0.0	100.0	98.4
Exiting Leg Total	7					8					47					1					63
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0.0	3.3	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Exiting Leg Total	0					0					1					0					1

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:15 PM	0	1	0	0	1	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	5
4:30 PM	0	7	0	0	7	0	0	1	0	1	3	1	0	0	4	0	0	0	0	0	12
4:45 PM	0	5	0	0	5	0	0	4	0	4	1	0	0	0	1	0	0	0	0	0	10
5:00 PM	0	7	0	0	7	0	0	3	0	3	1	1	0	0	2	1	0	0	0	1	13
Total Volume	0	20	0	0	20	0	0	11	0	11	5	3	0	0	8	1	0	0	0	1	40
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		62.5	37.5	0.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.714	0.000	0.000	0.714	0.000	0.000	0.688	0.000	0.688	0.417	0.750	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.250	0.769
Cars	0	20	0	0	20	0	0	11	0	11	5	3	0	0	8	1	0	0	0	1	40
Cars %	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	100.0	100.0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cars Enter Leg	0	20	0	0	20	0	0	11	0	11	5	3	0	0	8	1	0	0	0	1	40
Heavy Enter Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	0	20	0	0	20	0	0	11	0	11	5	3	0	0	8	1	0	0	0	1	40
Cars Exiting Leg	3					5					32					0					40
Heavy Exiting Leg	0					0					0					0					0
Total Exiting Leg	3					5					32					0					40

PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	3	0	0	3	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	7
4:15 PM	0	1	0	0	1	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	5
4:30 PM	0	7	0	0	7	0	0	1	0	1	3	1	0	0	4	0	0	0	0	0	12
4:45 PM	0	5	0	0	5	0	0	4	0	4	1	0	0	0	1	0	0	0	0	0	10
Total	0	16	0	0	16	0	0	9	0	9	6	3	0	0	9	0	0	0	0	0	34
5:00 PM	0	7	0	0	7	0	0	3	0	3	1	1	0	0	2	1	0	0	0	1	13
5:15 PM	0	1	0	0	1	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	5
5:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	5
5:45 PM	0	2	0	0	2	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	6
Total	0	13	0	0	13	0	0	7	0	7	2	4	1	0	7	2	0	0	0	2	29
Grand Total	0	29	0	0	29	0	0	16	0	16	8	7	1	0	16	2	0	0	0	2	63
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		50.0	43.8	6.3	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	46.0	0.0	0.0	46.0	0.0	0.0	25.4	0.0	25.4	12.7	11.1	1.6	0.0	25.4	3.2	0.0	0.0	0.0	3.2	
Exiting Leg Total	7					8					47					1					63

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:15 PM	0	1	0	0	1	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	5
4:30 PM	0	7	0	0	7	0	0	1	0	1	3	1	0	0	4	0	0	0	0	0	12
4:45 PM	0	5	0	0	5	0	0	4	0	4	1	0	0	0	1	0	0	0	0	0	10
5:00 PM	0	7	0	0	7	0	0	3	0	3	1	1	0	0	2	1	0	0	0	1	13
Total Volume	0	20	0	0	20	0	0	11	0	11	5	3	0	0	8	1	0	0	0	1	40
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		62.5	37.5	0.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.714	0.000	0.000	0.714	0.000	0.000	0.688	0.000	0.688	0.417	0.750	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.250	0.769
Entering Leg	0	20	0	0	20	0	0	11	0	11	5	3	0	0	8	1	0	0	0	1	40
Exiting Leg	3					5					32					0					40
Total	23					16					40					1					80

PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**



	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					1					0					1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0					0					0					0					0
Single-Unit Trucks	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Single-Unit	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Exiting Leg Total	0					0					1					0					1
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0					0					0					0					0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot						
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		Total
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single-Unit Trucks	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Single-Unit %	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single-Unit Trucks	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Buses	0					0					0					0					0	
Single-Unit Trucks	0					0					1					0					1	
Articulated Trucks	0					0					0					0					0	
Total Exiting Leg	0					0					1					0					1	

PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Buses

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					0					0					0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0					0					0					0					0
Total	0					0					0					0					0



PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Single-Unit Trucks

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					1					0					1

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg	0					0					1					0					1
Total	1					0					1					0					2

PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Articulated Trucks

	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					0					0					0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Mill Bridge					Quinn Access Road					Mirak Mill East Driveway					Parking Lot					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0					0					0					0					0
Total	0					0					0					0					0

PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							0							1							0							1

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
% Approach Total	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250		
Entering Leg	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Exiting Leg	0							0							1							0							1
Total	1							0							1							0							2

PDI File #: **207450 FF**  
 Location: **N: Mill Bridge S: Mirak Mill East Driveway**  
 Location: **E: Quinn Access Road W: Parking Lot**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Pedestrians

	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6
Approach %	0	0	0	0	0	0	0	0	0	0	0	66.7	33.3		0	0	0	0	0	0	0	0	0	0	0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	0	33.3	16.7	50	0	0	0	0	0	0	0	0	0	0	0	0	50	50	
Exiting Leg Total	0							3							0							3							6

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Mill Bridge							Quinn Access Road							Mirak Mill East Driveway							Parking Lot							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250		0.333
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
Exiting Leg	0							2							0							2							4
Total	0							4							0							4							8

PDI File #: 207450 G  
 Location: N: Forest Street S: Forest Street  
 Location: E: Ryder Street W: Peirce Street SE: Driveway  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 7:00 AM  
 End Time: 9:00 AM  
 Class:



### Cars and Heavy Vehicles (Combined)

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:00 AM	3	61	0	0	0	64	0	1	5	0	0	6	0	0	0	1	0	1	0	4	14	0	0	18	1	0	0	2	0	3	92
7:15 AM	9	58	0	0	0	67	2	0	6	0	0	8	0	0	0	1	0	1	0	1	14	0	0	15	0	0	0	3	0	3	94
7:30 AM	16	81	0	1	0	98	1	0	3	0	0	4	0	0	0	0	0	0	0	5	41	1	0	47	0	0	0	4	0	4	153
7:45 AM	34	62	0	3	0	99	1	0	1	0	0	2	0	0	0	0	0	0	0	2	50	1	0	53	0	0	0	0	0	0	154
Total	62	262	0	4	0	328	4	1	15	0	0	20	0	0	0	2	0	2	0	12	119	2	0	133	1	0	0	9	0	10	493
8:00 AM	6	74	0	5	0	85	1	0	3	0	0	4	0	1	0	0	0	1	0	2	53	1	0	56	1	0	0	4	0	5	151
8:15 AM	7	52	0	1	0	60	0	0	1	0	0	1	0	0	0	0	0	0	0	0	27	0	0	27	0	0	0	2	0	2	90
8:30 AM	1	44	0	2	0	47	1	0	0	0	0	1	0	0	0	0	0	0	0	1	26	0	0	27	0	0	0	1	0	1	76
8:45 AM	2	36	0	1	0	39	0	0	2	0	0	2	0	0	0	0	0	0	0	1	24	1	0	26	1	0	0	1	0	2	69
Total	16	206	0	9	0	231	2	0	6	0	0	8	0	1	0	0	0	1	0	4	130	2	0	136	2	0	0	8	0	10	386
Grand Total	78	468	0	13	0	559	6	1	21	0	0	28	0	1	0	2	0	3	0	16	249	4	0	269	3	0	0	17	0	20	879
Approach %	14.0	83.7	0.0	2.3	0.0		21.4	3.6	75.0	0.0	0.0		0.0	33.3	0.0	66.7	0.0		0.0	5.9	92.6	1.5	0.0		15.0	0.0	0.0	85.0	0.0		
Total %	8.9	53.2	0.0	1.5	0.0	63.6	0.7	0.1	2.4	0.0	0.0	3.2	0.0	0.1	0.0	0.2	0.0	0.3	0.0	1.8	28.3	0.5	0.0	30.6	0.3	0.0	0.0	1.9	0.0	2.3	
Exiting Leg Total	273						29						0						494						83						879
Cars	76	459	0	13	0	548	5	1	12	0	0	18	0	1	0	2	0	3	0	12	246	2	0	260	3	0	0	17	0	20	849
% Cars	97.4	98.1	0.0	100.0	0.0	98.0	83.3	100.0	57.1	0.0	0.0	64.3	0.0	100.0	0.0	100.0	0.0	100.0	0.0	75.0	98.8	50.0	0.0	96.7	100.0	0.0	0.0	100.0	0.0	100.0	96.6
Exiting Leg Total	269						25						0						476						79						849
Heavy Vehicles	2	9	0	0	0	11	1	0	9	0	0	10	0	0	0	0	0	0	0	4	3	2	0	9	0	0	0	0	0	0	30
% Heavy Vehicles	2.6	1.9	0.0	0.0	0.0	2.0	16.7	0.0	42.9	0.0	0.0	35.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	1.2	50.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Exiting Leg Total	4						4						0						18						4						30

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:15 AM	9	58	0	0	0	67	2	0	6	0	0	8	0	0	0	1	0	1	0	1	14	0	0	15	0	0	0	3	0	3	94
7:30 AM	16	81	0	1	0	98	1	0	3	0	0	4	0	0	0	0	0	0	0	5	41	1	0	47	0	0	0	4	0	4	153
7:45 AM	34	62	0	3	0	99	1	0	1	0	0	2	0	0	0	0	0	0	0	2	50	1	0	53	0	0	0	0	0	0	154
8:00 AM	6	74	0	5	0	85	1	0	3	0	0	4	0	1	0	0	0	1	0	2	53	1	0	56	1	0	0	4	0	5	151
Total Volume	65	275	0	9	0	349	5	0	13	0	0	18	0	1	0	1	0	2	0	10	158	3	0	171	1	0	0	11	0	12	552
% Approach Total	18.6	78.8	0.0	2.6	0.0		27.8	0.0	72.2	0.0	0.0		0.0	50.0	0.0	50.0	0.0		0.0	5.8	92.4	1.8	0.0		8.3	0.0	0.0	91.7	0.0		
PHF	0.478	0.849	0.000	0.450	0.000	0.881	0.625	0.000	0.542	0.000	0.000	0.563	0.000	0.250	0.000	0.250	0.000	0.500	0.000	0.500	0.745	0.750	0.000	0.763	0.250	0.000	0.000	0.688	0.000	0.600	0.896
Cars	64	272	0	9	0	345	4	0	8	0	0	12	0	1	0	1	0	2	0	7	156	2	0	165	1	0	0	11	0	12	536
Cars %	98.5	98.9	0.0	100.0	0.0	98.9	80.0	0.0	61.5	0.0	0.0	66.7	0.0	100.0	0.0	100.0	0.0	100.0	0.0	70.0	98.7	66.7	0.0	96.5	100.0	0.0	0.0	100.0	0.0	100.0	97.1
Heavy Vehicles	1	3	0	0	0	4	1	0	5	0	0	6	0	0	0	0	0	0	0	3	2	1	0	6	0	0	0	0	0	0	16
Heavy Vehicles %	1.5	1.1	0.0	0.0	0.0	1.1	20.0	0.0	38.5	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	1.3	33.3	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	2.9
Cars Enter Leg	64	272	0	9	0	345	4	0	8	0	0	12	0	1	0	1	0	2	0	7	156	2	0	165	1	0	0	11	0	12	536
Heavy Enter Leg	1	3	0	0	0	4	1	0	5	0	0	6	0	0	0	0	0	0	0	3	2	1	0	6	0	0	0	0	0	0	16
Total Entering Leg	65	275	0	9	0	349	5	0	13	0	0	18	0	1	0	1	0	2	0	10	158	3	0	171	1	0	0	11	0	12	552
Cars Exiting Leg	172						16						0						282						66						536
Heavy Exiting Leg	3						3						0						8						2						16
Total Exiting Leg	175						19						0						290						68						552



PDI File #: **207450 G**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:00 AM	3	59	0	0	0	62	0	1	3	0	0	4	0	0	0	1	0	1	0	4	14	0	0	18	1	0	0	2	0	3	88
7:15 AM	9	58	0	0	0	67	1	0	2	0	0	3	0	0	0	1	0	1	0	1	13	0	0	14	0	0	0	3	0	3	88
7:30 AM	16	81	0	1	0	98	1	0	2	0	0	3	0	0	0	0	0	0	0	2	40	0	0	42	0	0	0	4	0	4	147
7:45 AM	34	62	0	3	0	99	1	0	1	0	0	2	0	0	0	0	0	0	0	2	50	1	0	53	0	0	0	0	0	0	154
Total	62	260	0	4	0	326	3	1	8	0	0	12	0	0	0	2	0	2	0	9	117	1	0	127	1	0	0	9	0	10	477
8:00 AM	5	71	0	5	0	81	1	0	3	0	0	4	0	1	0	0	0	1	0	2	53	1	0	56	1	0	0	4	0	5	147
8:15 AM	7	51	0	1	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	27	0	0	0	2	0	2	88
8:30 AM	1	42	0	2	0	45	1	0	0	0	0	1	0	0	0	0	0	0	0	0	25	0	0	25	0	0	0	1	0	1	72
8:45 AM	1	35	0	1	0	37	0	0	1	0	0	1	0	0	0	0	0	0	0	1	24	0	0	25	1	0	0	1	0	2	65
Total	14	199	0	9	0	222	2	0	4	0	0	6	0	1	0	0	0	1	0	3	129	1	0	133	2	0	0	8	0	10	372
Grand Total	76	459	0	13	0	548	5	1	12	0	0	18	0	1	0	2	0	3	0	12	246	2	0	260	3	0	0	17	0	20	849
Approach %	13.9	83.8	0.0	2.4	0.0		27.8	5.6	66.7	0.0	0.0		0.0	33.3	0.0	66.7	0.0		0.0	4.6	94.6	0.8	0.0		15.0	0.0	0.0	85.0	0.0		
Total %	9.0	54.1	0.0	1.5	0.0	64.5	0.6	0.1	1.4	0.0	0.0	2.1	0.0	0.1	0.0	0.2	0.0	0.4	0.0	1.4	29.0	0.2	0.0	30.6	0.4	0.0	0.0	2.0	0.0	2.4	
Exiting Leg Total						269						25						0						476						79	849

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:15 AM	9	58	0	0	0	67	1	0	2	0	0	3	0	0	0	1	0	1	0	1	13	0	0	14	0	0	0	3	0	3	88
7:30 AM	16	81	0	1	0	98	1	0	2	0	0	3	0	0	0	0	0	0	0	2	40	0	0	42	0	0	0	4	0	4	147
7:45 AM	34	62	0	3	0	99	1	0	1	0	0	2	0	0	0	0	0	0	0	2	50	1	0	53	0	0	0	0	0	0	154
8:00 AM	5	71	0	5	0	81	1	0	3	0	0	4	0	1	0	0	0	1	0	2	53	1	0	56	1	0	0	4	0	5	147
Total Volume	64	272	0	9	0	345	4	0	8	0	0	12	0	1	0	1	0	2	0	7	156	2	0	165	1	0	0	11	0	12	536
% Approach Total	18.6	78.8	0.0	2.6	0.0		33.3	0.0	66.7	0.0	0.0		0.0	50.0	0.0	50.0	0.0		0.0	4.2	94.5	1.2	0.0		8.3	0.0	0.0	91.7	0.0		
PHF	0.471	0.840	0.000	0.450	0.000	0.871	1.000	0.000	0.667	0.000	0.000	0.750	0.000	0.250	0.000	0.250	0.000	0.500	0.000	0.875	0.736	0.500	0.000	0.737	0.250	0.000	0.000	0.688	0.000	0.600	0.870
Entering Leg	64	272	0	9	0	345	4	0	8	0	0	12	0	1	0	1	0	2	0	7	156	2	0	165	1	0	0	11	0	12	536
Exiting Leg						172						16						0						282						66	536
Total						517						28						2						447						78	1072

PDI File #: 207450 G  
 Location: N: Forest Street S: Forest Street  
 Location: E: Ryder Street W: Peirce Street SE: Driveway  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 7:00 AM  
 End Time: 9:00 AM  
 Class:



### Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:00 AM	0	2	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	1	0	4	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	1	1	0	5	0	0	0	0	0	0	6
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	0	2	1	0	7	0	0	8	0	0	0	0	0	0	0	3	2	1	0	6	0	0	0	0	0	0	16
8:00 AM	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	4
8:45 AM	1	1	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	4
Total	2	7	0	0	0	9	0	0	2	0	0	2	0	0	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	0	14
Grand Total	2	9	0	0	0	11	1	0	9	0	0	10	0	0	0	0	0	0	0	4	3	2	0	9	0	0	0	0	0	0	30
Approach %	18.2	81.8	0.0	0.0	0.0		10.0	0.0	90.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	44.4	33.3	22.2	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	6.7	30.0	0.0	0.0	0.0	36.7	3.3	0.0	30.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0		13.3	10.0	6.7	30.0		0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	4						4						0						18						4						30
Buses	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Buses	50.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	3.3
Exiting Leg Total	0						0						0						0						1						1
Single-Unit Trucks	1	9	0	0	0	10	1	0	8	0	0	9	0	0	0	0	0	0	0	3	3	2	0	8	0	0	0	0	0	0	27
% Single-Unit	50.0	100.0	0.0	0.0	0.0	90.9	100.0	0.0	88.9	0.0	0.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0		75.0	100.0	100.0	0.0	88.9		0.0	0.0	0.0	0.0	0.0	90.0
Exiting Leg Total	4						3						0						17						3						27
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0		25.0	0.0	0.0	0.0	11.1		0.0	0.0	0.0	0.0	0.0	6.7
Exiting Leg Total	0						1						0						1						0						2

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total	
	from North						from East						from Southeast						from South						from West							
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total		
7:00 AM	0	2	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
7:15 AM	0	0	0	0	0	0	1	0	4	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	6	
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	1	1	0	5	0	0	0	0	0	0	6	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	2	0	0	0	2	1	0	7	0	0	8	0	0	0	0	0	0	0	3	2	1	0	6	0	0	0	0	0	0	16	
% Approach Total	0.0	100.0	0.0	0.0	0.0		12.5	0.0	87.5	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	50.0	33.3	16.7	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.438	0.000	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.250	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.667	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Single-Unit Trucks	0	2	0	0	0	2	1	0	6	0	0	7	0	0	0	0	0	0	0	2	2	1	0	5	0	0	0	0	0	0	14	
Single-Unit %	0.0	100.0	0.0	0.0	0.0	100.0	100.0	0.0	85.7	0.0	0.0	87.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	100.0	100.0	0.0	83.3	0.0	0.0	0.0	0.0	0.0	0.0	87.5	
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	12.5	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Single-Unit Trucks	0	2	0	0	0	2	1	0	6	0	0	7	0	0	0	0	0	0	0	2	2	1	0	5	0	0	0	0	0	0	14	
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	
Total Entering Leg	0	2	0	0	0	2	1	0	7	0	0	8	0	0	0	0	0	0	0	3	2	1	0	6	0	0	0	0	0	0	16	
Buses													0												0						0	
Single-Unit Trucks													2												8						1	14
Articulated Trucks													1												1						0	2
Total Exiting Leg	3						3						0						9						1						16	

PDI File #: **207450 G**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Buses

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						0						0						0						1						1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	
Entering Leg	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg	0						0						0						0						1						1
Total	1						0						0						0						1						2

PDI File #: **207450 G**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Single-Unit Trucks

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:00 AM	0	2	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	1	0	3	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	1	1	0	4	0	0	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	0	2	1	0	6	0	0	7	0	0	0	0	0	0	0	2	2	1	0	5	0	0	0	0	0	0	14
8:00 AM	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	4
8:45 AM	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
Total	1	7	0	0	0	8	0	0	2	0	0	2	0	0	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	0	13
Grand Total	1	9	0	0	0	10	1	0	8	0	0	9	0	0	0	0	0	0	0	3	3	2	0	8	0	0	0	0	0	0	27
Approach %	10.0	90.0	0.0	0.0	0.0		11.1	0.0	88.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	37.5	37.5	25.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	3.7	33.3	0.0	0.0	0.0	37.0	3.7	0.0	29.6	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0		0.0	11.1	11.1	7.4	0.0	29.6	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	4						3						0						17						3						27

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:00 AM	0	2	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	1	0	3	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	1	1	0	4	0	0	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	0	0	2	1	0	6	0	0	7	0	0	0	0	0	0	0	2	2	1	0	5	0	0	0	0	0	0	14
% Approach Total	0.0	100.0	0.0	0.0	0.0		14.3	0.0	85.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	40.0	40.0	20.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.000	0.000	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.250	0.000	0.313	0.000	0.000	0.000	0.000	0.000	0.000	0.700
Entering Leg	0	2	0	0	0	2	1	0	6	0	0	7	0	0	0	0	0	0	0	2	2	1	0	5	0	0	0	0	0	0	14
Exiting Leg	3						2						0						8						1						14
Total	5						9						0						13						1						28

PDI File #: **207450 G**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Articulated Trucks

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total	
	from North						from East						from Southeast						from South						from West							
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						1						0						1						0						2	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Exiting Leg	0						1						0						1						0						2
Total	0						2						0						2						0						4



PDI File #: **207450 G**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total	
	from North								from East								from Southeast								from South								from West									
	Right	Thru	Bear Left	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0								3								2								0								0								5	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total
	from North								from East								from Southeast								from South								from West								
	Right	Thru	Bear Left	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	
Exiting Leg								0								2																							0	4	
Total								0				4				2										2											0		8		

PDI File #: **207450 G**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Pedestrians

	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total
	from North								from East								from Southeast								from South								from West								
	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-SB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	1	25	0	0	0	0	0	3	0	3	0	0	0	0	0	0	7	7	35
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	11	31
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	2	38	0	0	0	0	0	3	0	3	0	0	0	0	0	0	10	10	51
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	6	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	9		
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	42	3	45	0	0	0	0	0	3	0	3	0	0	0	0	0	11	11	60	
Approach %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100		0	0	0	0	0	93.3	6.67		0	0	0	0	0	100	0		0	0	0	0	0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.67	1.67	0	0	0	0	0	70	5	75	0	0	0	0	0	5	0	5	0	0	0	0	18.3	18.3			
Exiting Leg Total	0								1								45								3								11								60

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total
	from North								from East								from Southeast								from South								from West								
	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	1	25	0	0	0	0	0	3	0	3	0	0	0	0	0	0	7	7	35
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	11	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	2	38	0	0	0	0	0	3	0	3	0	0	0	0	0	0	10	10	51
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	94.7	5.3		0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.500	0.380	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.357	0.357	0.364	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	2	38	0	0	0	0	0	3	0	3	0	0	0	0	0	10	10	51	
Exiting Leg	0								0								38								3								10								51
Total	0								0								76								6								20								102

PDI File #: 207450 GG  
 Location: N: Forest Street S: Forest Street  
 Location: E: Ryder Street W: Peirce Street SE: Driveway  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 4:00 PM  
 End Time: 6:00 PM  
 Class:



### Cars and Heavy Vehicles (Combined)

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
4:00 PM	0	30	0	1	0	31	1	0	3	0	0	4	0	0	0	0	0	0	0	2	43	0	0	45	1	0	0	1	0	2	82
4:15 PM	0	23	1	2	0	26	3	0	1	0	0	4	0	0	0	0	0	0	0	1	62	1	0	64	0	0	0	4	0	4	98
4:30 PM	0	31	0	0	0	31	3	0	2	0	0	5	0	2	0	1	0	3	0	3	47	1	0	51	0	0	0	1	0	1	91
4:45 PM	1	26	1	1	0	29	4	0	3	0	0	7	0	0	0	1	0	1	0	3	36	0	0	39	0	0	0	2	0	2	78
Total	1	110	2	4	0	117	11	0	9	0	0	20	0	2	0	2	0	4	0	9	188	2	0	199	1	0	0	8	0	9	349
5:00 PM	1	25	0	1	0	27	3	0	2	0	0	5	0	0	0	0	0	0	2	0	73	1	0	76	0	0	1	2	0	3	111
5:15 PM	1	16	0	2	0	19	1	0	1	0	0	2	0	0	0	1	0	1	0	0	72	1	0	73	0	0	0	1	0	1	96
5:30 PM	1	21	1	2	0	25	1	1	3	0	0	5	0	0	0	0	0	0	0	3	67	0	0	70	1	0	0	2	0	3	103
5:45 PM	2	28	0	0	0	30	0	0	3	0	0	3	0	0	0	0	0	0	0	1	61	2	0	64	1	0	0	2	0	3	100
Total	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	4	273	4	0	283	2	0	1	7	0	10	410
Grand Total	6	200	3	9	0	218	16	1	18	0	0	35	0	2	0	3	0	5	2	13	461	6	0	482	3	0	1	15	0	19	759
Approach %	2.8	91.7	1.4	4.1	0.0		45.7	2.9	51.4	0.0	0.0		0.0	40.0	0.0	60.0	0.0		0.4	2.7	95.6	1.2	0.0		15.8	0.0	5.3	78.9	0.0		
Total %	0.8	26.4	0.4	1.2	0.0	28.7	2.1	0.1	2.4	0.0	0.0	4.6	0.0	0.3	0.0	0.4	0.0	0.7	0.3	1.7	60.7	0.8	0.0	63.5	0.4	0.0	0.1	2.0	0.0	2.5	
Exiting Leg Total	494						23						5						224						13						759
Cars	6	200	3	8	0	217	16	1	18	0	0	35	0	2	0	3	0	5	2	9	458	6	0	475	3	0	1	15	0	19	751
% Cars	100.0	100.0	100.0	88.9	0.0	99.5	100.0	100.0	100.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	100.0	69.2	99.3	100.0	0.0	98.5	100.0	0.0	100.0	100.0	0.0	100.0	98.9
Exiting Leg Total	491						18						5						224						13						751
Heavy Vehicles	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	7	0	0	0	0	0	0	8
% Heavy Vehicles	0.0	0.0	0.0	11.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.8	0.7	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Exiting Leg Total	3						5						0						0						0						8

### Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
5:00 PM	1	25	0	1	0	27	3	0	2	0	0	5	0	0	0	0	0	0	2	0	73	1	0	76	0	0	1	2	0	3	111
5:15 PM	1	16	0	2	0	19	1	0	1	0	0	2	0	0	0	1	0	1	0	0	72	1	0	73	0	0	0	1	0	1	96
5:30 PM	1	21	1	2	0	25	1	1	3	0	0	5	0	0	0	0	0	0	0	3	67	0	0	70	1	0	0	2	0	3	103
5:45 PM	2	28	0	0	0	30	0	0	3	0	0	3	0	0	0	0	0	0	0	1	61	2	0	64	1	0	0	2	0	3	100
Total Volume	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	4	273	4	0	283	2	0	1	7	0	10	410
% Approach Total	5.0	89.1	1.0	5.0	0.0		33.3	6.7	60.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.7	1.4	96.5	1.4	0.0		20.0	0.0	10.0	70.0	0.0		
PHF	0.625	0.804	0.250	0.625	0.000	0.842	0.417	0.250	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.250	0.000	0.250	0.250	0.333	0.935	0.500	0.000	0.931	0.500	0.000	0.250	0.875	0.000	0.833	0.923
Cars	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	3	271	4	0	280	2	0	1	7	0	10	407
Cars %	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0	100.0	75.0	99.3	100.0	0.0	98.9	100.0	0.0	100.0	100.0	0.0	100.0	99.3
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	3
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.7	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Cars Enter Leg	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	3	271	4	0	280	2	0	1	7	0	10	407
Heavy Enter Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	3
Total Entering Leg	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	4	273	4	0	283	2	0	1	7	0	10	410
Cars Exiting Leg	283						9						3						102						10						407
Heavy Exiting Leg	2						1						0						0						0						3
Total Exiting Leg	285						10						3						102						10						410

PDI File #: **207450 GG**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
4:00 PM	0	30	0	0	0	30	1	0	3	0	0	4	0	0	0	0	0	0	0	1	42	0	0	43	1	0	0	1	0	2	79
4:15 PM	0	23	1	2	0	26	3	0	1	0	0	4	0	0	0	0	0	0	0	0	62	1	0	63	0	0	0	4	0	4	97
4:30 PM	0	31	0	0	0	31	3	0	2	0	0	5	0	2	0	1	0	3	0	3	47	1	0	51	0	0	0	1	0	1	91
4:45 PM	1	26	1	1	0	29	4	0	3	0	0	7	0	0	0	1	0	1	0	2	36	0	0	38	0	0	0	2	0	2	77
Total	1	110	2	3	0	116	11	0	9	0	0	20	0	2	0	2	0	4	0	6	187	2	0	195	1	0	0	8	0	9	344
5:00 PM	1	25	0	1	0	27	3	0	2	0	0	5	0	0	0	0	0	0	2	0	71	1	0	74	0	0	1	2	0	3	109
5:15 PM	1	16	0	2	0	19	1	0	1	0	0	2	0	0	0	1	0	1	0	0	72	1	0	73	0	0	0	1	0	1	96
5:30 PM	1	21	1	2	0	25	1	1	3	0	0	5	0	0	0	0	0	0	0	2	67	0	0	69	1	0	0	2	0	3	102
5:45 PM	2	28	0	0	0	30	0	0	3	0	0	3	0	0	0	0	0	0	0	1	61	2	0	64	1	0	0	2	0	3	100
Total	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	3	271	4	0	280	2	0	1	7	0	10	407
Grand Total	6	200	3	8	0	217	16	1	18	0	0	35	0	2	0	3	0	5	2	9	458	6	0	475	3	0	1	15	0	19	751
Approach %	2.8	92.2	1.4	3.7	0.0		45.7	2.9	51.4	0.0	0.0		0.0	40.0	0.0	60.0	0.0		0.4	1.9	96.4	1.3	0.0		15.8	0.0	5.3	78.9	0.0		
Total %	0.8	26.6	0.4	1.1	0.0	28.9	2.1	0.1	2.4	0.0	0.0	4.7	0.0	0.3	0.0	0.4	0.0	0.7	0.3	1.2	61.0	0.8	0.0	63.2	0.4	0.0	0.1	2.0	0.0	2.5	
Exiting Leg Total						491						18						5						224						13	751

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
5:00 PM	1	25	0	1	0	27	3	0	2	0	0	5	0	0	0	0	0	0	2	0	71	1	0	74	0	0	1	2	0	3	109
5:15 PM	1	16	0	2	0	19	1	0	1	0	0	2	0	0	0	1	0	1	0	0	72	1	0	73	0	0	0	1	0	1	96
5:30 PM	1	21	1	2	0	25	1	1	3	0	0	5	0	0	0	0	0	0	0	2	67	0	0	69	1	0	0	2	0	3	102
5:45 PM	2	28	0	0	0	30	0	0	3	0	0	3	0	0	0	0	0	0	0	1	61	2	0	64	1	0	0	2	0	3	100
Total Volume	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	3	271	4	0	280	2	0	1	7	0	10	407
% Approach Total	5.0	89.1	1.0	5.0	0.0		33.3	6.7	60.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.7	1.1	96.8	1.4	0.0		20.0	0.0	10.0	70.0	0.0		
PHF	0.625	0.804	0.250	0.625	0.000	0.842	0.417	0.250	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.250	0.000	0.250	0.250	0.375	0.941	0.500	0.000	0.946	0.500	0.000	0.250	0.875	0.000	0.833	0.933
Entering Leg	5	90	1	5	0	101	5	1	9	0	0	15	0	0	0	1	0	1	2	3	271	4	0	280	2	0	1	7	0	10	407
Exiting Leg						283						9						3						102						10	407
Total						384						24						4						382						20	814



PRECISION  
DATA  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total	
	from North						from East						from Southeast						from South						from West							
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	
Total	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	5	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	3	
Grand Total	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	7	0	0	0	0	0	0	8	
Approach %	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	57.1	42.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	12.5	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	37.5	0.0	0.0	87.5	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	3						5						0						0						0						8	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						0						0						0						0						0	
Single-Unit Trucks	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	7	0	0	0	0	0	0	8	
% Single-Unit	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	
Exiting Leg Total	3																															

[illegible]



PDI File #: **207450 GG**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Buses

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0						0						0						0						0						

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg	0						0						0						0						0						0
Total	0						0						0						0						0						0

PDI File #: **207450 GG**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Single-Unit Trucks

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total	
	from North						from East						from Southeast						from South						from West							
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	
Total	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	5	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	3	
Grand Total	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	7	0	0	0	0	0	0	8	
Approach %	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	57.1	42.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	12.5	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	37.5	0.0	0.0	87.5	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	3						5						0						0						0						8	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total	
	from North						from East						from Southeast						from South						from West							
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	
Total Volume	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	5	
% Approach Total	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.417	
Entering Leg	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	5	
Exiting Leg	1						4						0						0						0						5	
Total	2						4						0						4						0						10	

PDI File #: **207450 GG**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Articulated Trucks

	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0						0						0						0						0						

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Forest Street						Ryder Street						Driveway						Forest Street						Peirce Street						Total
	from North						from East						from Southeast						from South						from West						
	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg	0						0						0						0						0						0
Total	0						0						0						0						0						0

PDI File #: **207450 GG**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total
	from North								from East								from Southeast								from South								from West								
	Right	Thru	Bear Left	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	
Grand Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	4			
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0			
Exiting Leg Total	0								2								0								1								1								4

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total			
	from North								from East								from Southeast								from South								from West											
	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-SB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Total Volume	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3			
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	50.0	50.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0					
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.500		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3			
Exiting Leg								0									0										1													1	3			
Total								0									3										2											1		6				

PDI File #: **207450 GG**  
 Location: **N: Forest Street S: Forest Street**  
 Location: **E: Ryder Street W: Peirce Street SE: Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Pedestrians

	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total	
	from North								from East								from Southeast								from South								from West									
	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-SB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0	4	5		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	3	6	0	0	0	0	0	1	0	1	0	0	0	0	5	0	5	13	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	6	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2	4	6	0	0	0	0	0	0	1	1	0	0	0	0	0	2	2	11	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3	0	0	0	0	0	5	7	12	0	0	0	0	0	1	1	2	0	0	0	0	5	2	7	24		
Approach %	0	0	0	0	0	0	0	0	0	0	0	0	33.3	66.7			0	0	0	0	0	41.7	58.3		0	0	0	0	0	50	50	0	0	0	0	0	71.4	28.6				
Total %	0	0	0	0	0	0	0	0	0	0	0	0	4.17	8.33	12.5	50	0	0	0	0	0	20.8	29.2	50		0	0	0	0	0	4.17	4.17	8.33	0	0	0	0	20.8	8.33	29.2		
Exiting Leg Total	0								3								12								2								7								24	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Forest Street								Ryder Street								Driveway								Forest Street								Peirce Street								Total
	from North								from East								from Southeast								from South								from West								
	Right	Thru	Bear Left	Left	U-Turn	CW-SB	CW-WB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	5	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	3	3	0	0	0	0	0	0	1	1	0	0	0	0	1	1	6		
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	2	6	8	0	0	0	0	0	0	1	1	0	0	0	0	4	1	5	15	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	80.0	20.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.313	0.625	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	2	6	8	0	0	0	0	0	0	1	1	0	0	0	0	4	1	5	15	
Exiting Leg	0								1								8								1								5								15
Total	0								2								16								2								10								30



PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	1	0	2	0	5	0	5	1	3	0	4	11
7:15 AM	6	0	0	6	0	2	0	2	0	1	0	1	9
7:30 AM	4	0	0	4	0	0	0	0	4	3	0	7	11
7:45 AM	1	1	0	2	1	1	0	2	3	2	0	5	9
Total	12	2	0	14	1	8	0	9	8	9	0	17	40
8:00 AM	3	0	0	3	0	1	0	1	5	2	0	7	11
8:15 AM	1	3	0	4	0	0	0	0	1	0	0	1	5
8:30 AM	1	0	0	1	0	1	0	1	3	0	0	3	5
8:45 AM	0	0	0	0	0	2	0	2	0	2	0	2	4
Total	5	3	0	8	0	4	0	4	9	4	0	13	25
Grand Total	17	5	0	22	1	12	0	13	17	13	0	30	65
Approach %	77.3	22.7	0.0		7.7	92.3	0.0		56.7	43.3	0.0		
Total %	26.2	7.7	0.0	33.8	1.5	18.5	0.0	20.0	26.2	20.0	0.0	46.2	
Exiting Leg Total	14				22				29				65
Cars	11	5	0	16	1	9	0	10	15	12	0	27	53
% Cars	64.7	100.0	0.0	72.7	100.0	75.0	0.0	76.9	88.2	92.3	0.0	90.0	81.5
Exiting Leg Total	13				20				20				53
Heavy Vehicles	6	0	0	6	0	3	0	3	2	1	0	3	12
% Heavy Vehicles	35.3	0.0	0.0	27.3	0.0	25.0	0.0	23.1	11.8	7.7	0.0	10.0	18.5
Exiting Leg Total	1				2				9				12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	1	0	2	0	5	0	5	1	3	0	4	11
7:15 AM	6	0	0	6	0	2	0	2	0	1	0	1	9
7:30 AM	4	0	0	4	0	0	0	0	4	3	0	7	11
7:45 AM	1	1	0	2	1	1	0	2	3	2	0	5	9
Total Volume	12	2	0	14	1	8	0	9	8	9	0	17	40
% Approach Total	85.7	14.3	0.0		11.1	88.9	0.0		47.1	52.9	0.0		
PHF	0.500	0.500	0.000	0.583	0.250	0.400	0.000	0.450	0.500	0.750	0.000	0.607	0.909
Cars	7	2	0	9	1	6	0	7	7	8	0	15	31
Cars %	58.3	100.0	0.0	64.3	100.0	75.0	0.0	77.8	87.5	88.9	0.0	88.2	77.5
Heavy Vehicles	5	0	0	5	0	2	0	2	1	1	0	2	9
Heavy Vehicles %	41.7	0.0	0.0	35.7	0.0	25.0	0.0	22.2	12.5	11.1	0.0	11.8	22.5
Cars Enter Leg	7	2	0	9	1	6	0	7	7	8	0	15	31
Heavy Enter Leg	5	0	0	5	0	2	0	2	1	1	0	2	9
Total Entering Leg	12	2	0	14	1	8	0	9	8	9	0	17	40
Cars Exiting Leg				9				9				13	31
Heavy Exiting Leg				1				1				7	9
Total Exiting Leg				10				10				20	40

PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars

	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	1	0	1	0	4	0	4	1	3	0	4	9
7:15 AM	3	0	0	3	0	1	0	1	0	1	0	1	5
7:30 AM	3	0	0	3	0	0	0	0	3	2	0	5	8
7:45 AM	1	1	0	2	1	1	0	2	3	2	0	5	9
Total	7	2	0	9	1	6	0	7	7	8	0	15	31
8:00 AM	3	0	0	3	0	1	0	1	5	2	0	7	11
8:15 AM	0	3	0	3	0	0	0	0	1	0	0	1	4
8:30 AM	1	0	0	1	0	1	0	1	2	0	0	2	4
8:45 AM	0	0	0	0	0	1	0	1	0	2	0	2	3
Total	4	3	0	7	0	3	0	3	8	4	0	12	22
Grand Total	11	5	0	16	1	9	0	10	15	12	0	27	53
Approach %	68.8	31.3	0.0		10.0	90.0	0.0		55.6	44.4	0.0		
Total %	20.8	9.4	0.0	30.2	1.9	17.0	0.0	18.9	28.3	22.6	0.0	50.9	
Exiting Leg Total	13				20				20				53

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	3	0	0	3	0	1	0	1	0	1	0	1	5
7:30 AM	3	0	0	3	0	0	0	0	3	2	0	5	8
7:45 AM	1	1	0	2	1	1	0	2	3	2	0	5	9
8:00 AM	3	0	0	3	0	1	0	1	5	2	0	7	11
Total Volume	10	1	0	11	1	3	0	4	11	7	0	18	33
% Approach Total	90.9	9.1	0.0		25.0	75.0	0.0		61.1	38.9	0.0		
PHF	0.833	0.250	0.000	0.917	0.250	0.750	0.000	0.500	0.550	0.875	0.000	0.643	0.750
Entering Leg	10	1	0	11	1	3	0	4	11	7	0	18	33
Exiting Leg				8				12				13	33
Total				19				16				31	66

PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**



Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	2
7:15 AM	3	0	0	3	0	1	0	1	0	0	0	0	4
7:30 AM	1	0	0	1	0	0	0	0	1	1	0	2	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	0	0	5	0	2	0	2	1	1	0	2	9
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
8:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	1	0	0	1	0	1	0	1	1	0	0	1	3
Grand Total	6	0	0	6	0	3	0	3	2	1	0	3	12
Approach %	100.0	0.0	0.0		0.0	100.0	0.0		66.7	33.3	0.0		
Total %	50.0	0.0	0.0	50.0	0.0	25.0	0.0	25.0	16.7	8.3	0.0	25.0	
Exiting Leg Total	1				2				9				12
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0				0				0				0
Single-Unit Trucks	5	0	0	5	0	3	0	3	1	1	0	2	10
% Single-Unit	83.3	0.0	0.0	83.3	0.0	100.0	0.0	100.0	50.0	100.0	0.0	66.7	83.3
Exiting Leg Total	1				1				8				10
Articulated Trucks	1	0	0	1	0	0	0	0	1	0	0	1	2
% Articulated	16.7	0.0	0.0	16.7	0.0	0.0	0.0	0.0	50.0	0.0	0.0	33.3	16.7
Exiting Leg Total	0				1				1				2

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	2
7:15 AM	3	0	0	3	0	1	0	1	0	0	0	0	4
7:30 AM	1	0	0	1	0	0	0	0	1	1	0	2	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	5	0	0	5	0	2	0	2	1	1	0	2	9
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		50.0	50.0	0.0		
PHF	0.417	0.000	0.000	0.417	0.000	0.500	0.000	0.500	0.250	0.250	0.000	0.250	0.563
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single-Unit Trucks	4	0	0	4	0	2	0	2	0	1	0	1	7
Single-Unit %	80.0	0.0	0.0	80.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	50.0	77.8
Articulated Trucks	1	0	0	1	0	0	0	0	1	0	0	1	2
Articulated %	20.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	50.0	22.2
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Single-Unit Trucks	4	0	0	4	0	2	0	2	0	1	0	1	7
Articulated Trucks	1	0	0	1	0	0	0	0	1	0	0	1	2
Total Entering Leg	5	0	0	5	0	2	0	2	1	1	0	2	9
Buses				0				0				0	0
Single-Unit Trucks				1				0				6	7
Articulated Trucks				0				1				1	2
Total Exiting Leg				1				1				7	9

PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**



Class:

**Buses**

	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total	
	from North				from East				from South					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0				0				0				0	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg				0				0				0	0
Total				0				0				0	0

PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Single-Unit Trucks

	Ryder Street					Mirak Mill Park South Driveway					Ryder Street					Total
	from North					from East					from South					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
7:00 AM	1	0	0	1		0	1	0	1		0	0	0	0		2
7:15 AM	2	0	0	2		0	1	0	1		0	0	0	0		3
7:30 AM	1	0	0	1		0	0	0	0		0	1	0	1		2
7:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0
Total	4	0	0	4		0	2	0	2		0	1	0	1		7
8:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0
8:15 AM	1	0	0	1		0	0	0	0		0	0	0	0		1
8:30 AM	0	0	0	0		0	0	0	0		1	0	0	1		1
8:45 AM	0	0	0	0		0	1	0	1		0	0	0	0		1
Total	1	0	0	1		0	1	0	1		1	0	0	1		3
Grand Total	5	0	0	5		0	3	0	3		1	1	0	2		10
Approach %	100.0	0.0	0.0			0.0	100.0	0.0			50.0	50.0	0.0			
Total %	50.0	0.0	0.0	50.0		0.0	30.0	0.0	30.0		10.0	10.0	0.0	20.0		
Exiting Leg Total	1					1					8					10

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	2
7:15 AM	2	0	0	2	0	1	0	1	0	0	0	0	3
7:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	4	0	0	4	0	2	0	2	0	1	0	1	7
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.500	0.000	0.500	0.000	0.250	0.000	0.250	0.583
Entering Leg	4	0	0	4	0	2	0	2	0	1	0	1	7
Exiting Leg				1				0				6	7
Total				5				2				7	14



PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Articulated Trucks

	Ryder Street					Mirak Mill Park South Driveway					Ryder Street					Total
	from North					from East					from South					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1		0	0	0	0		0	0	0	0		1
7:30 AM	0	0	0	0		0	0	0	0		1	0	0	1		1
7:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0
Total	1	0	0	1		0	0	0	0		1	0	0	1		2
8:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0
8:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0
8:30 AM	0	0	0	0		0	0	0	0		0	0	0	0		0
8:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0
Total	0	0	0	0		0	0	0	0		0	0	0	0		0
Grand Total	1	0	0	1		0	0	0	0		1	0	0	1		2
Approach %	100.0	0.0	0.0			0.0	0.0	0.0			100.0	0.0	0.0			
Total %	50.0	0.0	0.0	50.0		0.0	0.0	0.0	0.0		50.0	0.0	0.0	50.0		
Exiting Leg Total	0					1					1					2

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	1	0	0	1	2
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.500
Entering Leg	1	0	0	1	0	0	0	0	1	0	0	1	2
Exiting Leg				0				1				1	2
Total				1				1				2	4

PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**



Class: **Bicycles (on Roadway and Crosswalks)**

	Ryder Street						Mirak Mill Park South Driveway						Ryder Street						Total	
	from North						from East						from South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	0	1	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	4
Grand Total	3	1	0	0	0	4	0	0	0	0	0	0	0	0	3	0	0	0	3	7
Approach %	75.0	25.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
Total %	42.9	14.3	0.0	0.0	0.0	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9	0.0	0.0	0.0	42.9		
Exiting Leg Total	3						1						3						7	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Ryder Street						Mirak Mill Park South Driveway						Ryder Street						Total	
	from North						from East						from South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
7:45 AM	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total Volume	3	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	2	5
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500		0.417
Entering Leg	3	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	2	5
Exiting Leg	2						0						3						5	
Total	5						0						5						10	

PDI File #: **207450 H**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Pedestrians

	Ryder Street						Mirak Mill Park South Driveway						Ryder Street						Total	
	from North						from East						from South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	21	1	22	0	0	0	0	0	0	22
7:45 AM	0	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	8
Total	0	0	0	0	0	0	0	0	0	0	30	2	32	0	0	0	0	0	0	32
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	4
Grand Total	0	0	0	0	0	0	0	0	0	0	33	3	36	0	0	0	0	0	0	36
Approach %	0	0	0	0	0	0	0	0	0	0	91.667	8.3333		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	91.667	8.3333	100	0	0	0	0	0	0	
Exiting Leg Total	0						36						0						36	

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Ryder Street						Mirak Mill Park South Driveway						Ryder Street						Total
	from North						from East						from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	21	1	22	0	0	0	0	0	0	22
7:45 AM	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	8
Total Volume	0	0	0	0	0	0	0	0	0	30	2	32	0	0	0	0	0	0	32
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	93.8	6.3		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.357	0.500	0.364	0.000	0.000	0.000	0.000	0.000	0.000	0.364
Entering Leg	0	0	0	0	0	0	0	0	0	30	2	32	0	0	0	0	0	0	32
Exiting Leg	0						32						0						32
Total	0						64						0						64

PDI File #: **207450 HH**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	2	0	0	2	2	3	0	5	1	1	0	2	9
4:15 PM	2	0	0	2	1	1	0	2	2	1	0	3	7
4:30 PM	1	1	0	2	1	3	0	4	0	3	0	3	9
4:45 PM	1	0	0	1	0	6	0	6	0	3	0	3	10
Total	6	1	0	7	4	13	0	17	3	8	0	11	35
5:00 PM	1	0	0	1	0	4	0	4	1	0	0	1	6
5:15 PM	0	0	0	0	0	2	0	2	1	1	0	2	4
5:30 PM	1	0	0	1	1	3	0	4	2	3	1	6	11
5:45 PM	3	0	0	3	0	0	0	0	0	1	1	2	5
Total	5	0	0	5	1	9	0	10	4	5	2	11	26
Grand Total	11	1	0	12	5	22	0	27	7	13	2	22	61
Approach %	91.7	8.3	0.0		18.5	81.5	0.0		31.8	59.1	9.1		
Total %	18.0	1.6	0.0	19.7	8.2	36.1	0.0	44.3	11.5	21.3	3.3	36.1	
Exiting Leg Total	18				8				35				61
Cars	11	1	0	12	5	22	0	27	5	11	2	18	57
% Cars	100.0	100.0	0.0	100.0	100.0	100.0	0.0	100.0	71.4	84.6	100.0	81.8	93.4
Exiting Leg Total	16				6				35				57
Heavy Vehicles	0	0	0	0	0	0	0	0	2	2	0	4	4
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	15.4	0.0	18.2	6.6
Exiting Leg Total	2				2				0				4

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Ryder Street					Mirak Mill Park South Driveway					Ryder Street					Total
	from North					from East					from South					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	2	0	0	0	2	2	3	0	0	5	1	1	0	0	2	9
4:15 PM	2	0	0	0	2	1	1	0	0	2	2	1	0	0	3	7
4:30 PM	1	1	0	0	2	1	3	0	0	4	0	3	0	0	3	9
4:45 PM	1	0	0	0	1	0	6	0	0	6	0	3	0	0	3	10
Total Volume	6	1	0	0	7	4	13	0	0	17	3	8	0	0	11	35
% Approach Total	85.7	14.3	0.0	0.0		23.5	76.5	0.0	0.0		27.3	72.7	0.0	0.0		
PHF	0.750	0.250	0.000	0.875		0.500	0.542	0.000	0.708		0.375	0.667	0.000	0.917		0.875
Cars	6	1	0	0	7	4	13	0	0	17	2	6	0	0	8	32
Cars %	100.0	100.0	0.0	0.0	100.0	100.0	100.0	0.0	0.0	100.0	66.7	75.0	0.0	0.0	72.7	91.4
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	25.0	0.0	0.0	27.3	8.6
Cars Enter Leg	6	1	0	0	7	4	13	0	0	17	2	6	0	0	8	32
Heavy Enter Leg	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3
Total Entering Leg	6	1	0	0	7	4	13	0	0	17	3	8	0	0	11	35
Cars Exiting Leg					10					3					19	32
Heavy Exiting Leg					2					1					0	3
Total Exiting Leg					12					4					19	35

PDI File #: **207450 HH**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars

	Ryder Street					Mirak Mill Park South Driveway					Ryder Street					Total
	from North					from East					from South					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	2	0	0	2		2	3	0	5		0	1	0	1		8
4:15 PM	2	0	0	2		1	1	0	2		2	0	0	2		6
4:30 PM	1	1	0	2		1	3	0	4		0	3	0	3		9
4:45 PM	1	0	0	1		0	6	0	6		0	2	0	2		9
Total	6	1	0	7		4	13	0	17		2	6	0	8		32
5:00 PM	1	0	0	1		0	4	0	4		1	0	0	1		6
5:15 PM	0	0	0	0		0	2	0	2		1	1	0	2		4
5:30 PM	1	0	0	1		1	3	0	4		1	3	1	5		10
5:45 PM	3	0	0	3		0	0	0	0		0	1	1	2		5
Total	5	0	0	5		1	9	0	10		3	5	2	10		25
Grand Total	11	1	0	12		5	22	0	27		5	11	2	18		57
Approach %	91.7	8.3	0.0			18.5	81.5	0.0			27.8	61.1	11.1			
Total %	19.3	1.8	0.0	21.1		8.8	38.6	0.0	47.4		8.8	19.3	3.5	31.6		
Exiting Leg Total	16					6					35					57

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	2	0	0	2	2	3	0	5	0	1	0	1	8
4:15 PM	2	0	0	2	1	1	0	2	2	0	0	2	6
4:30 PM	1	1	0	2	1	3	0	4	0	3	0	3	9
4:45 PM	1	0	0	1	0	6	0	6	0	2	0	2	9
Total Volume	6	1	0	7	4	13	0	17	2	6	0	8	32
% Approach Total	85.7	14.3	0.0		23.5	76.5	0.0		25.0	75.0	0.0		
PHF	0.750	0.250	0.000	0.875	0.500	0.542	0.000	0.708	0.250	0.500	0.000	0.667	0.889
Entering Leg	6	1	0	7	4	13	0	17	2	6	0	8	32
Exiting Leg	10				3				19				32
Total	17				20				27				64



PDI File #: **207450 HH**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**



Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	1	2	0	3	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	0	0	0	0	0	0	0	0	2	2	0	4	4
Approach %	0.0	0.0	0.0		0.0	0.0	0.0		50.0	50.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	100.0	
Exiting Leg Total	2				2				0				4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0				0				0				0
Single-Unit Trucks	0	0	0	0	0	0	0	0	2	2	0	4	4
% Single-Unit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	100.0	100.0
Exiting Leg Total	2				2				0				4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0				0				0				0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	1	2	0	3	3
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		33.3	66.7	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.750	0.750
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single-Unit Trucks	0	0	0	0	0	0	0	0	1	2	0	3	3
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	100.0	100.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Single-Unit Trucks	0	0	0	0	0	0	0	0	1	2	0	3	3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	0	0	0	0	0	0	0	0	1	2	0	3	3
Buses				0				0				0	0
Single-Unit Trucks				2				1				0	3
Articulated Trucks				0				0				0	0
Total Exiting Leg				2				1				0	3

PDI File #: **207450 HH**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Buses

	Ryder Street					Mirak Mill Park South Driveway					Ryder Street					Total
	from North					from East					from South					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Exiting Leg Total	0					0					0					0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg				0				0				0	0
Total				0				0				0	

PDI File #: **207450 HH**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Single-Unit Trucks

	Ryder Street					Mirak Mill Park South Driveway					Ryder Street					Total
	from North					from East					from South					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	4
Approach %	0.0	0.0	0.0			0.0	0.0	0.0			50.0	50.0	0.0			
Total %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		50.0	50.0	0.0	100.0		
Exiting Leg Total	2					2					0					4

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	1	2	0	3	3
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		33.3	66.7	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.750	0.750
Entering Leg	0	0	0	0	0	0	0	0	1	2	0	3	3
Exiting Leg				2				1				0	3
Total				2				1				3	

PDI File #: **207450 HH**  
 Location: **N: Ryder Street S: Ryder Street**  
 Location: **E: Mirak Mill Park South Driveway**  
 City, State: **Arlington, MA**  
 Client: **Nitsch Eng/B.Zimolka**  
 Site Code: **TBD**  
 Count Date: **Tuesday, February 4, 2020**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Articulated Trucks

	Ryder Street					Mirak Mill Park South Driveway					Ryder Street					Total
	from North					from East					from South					
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total		Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Exiting Leg Total	0					0					0					0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Ryder Street				Mirak Mill Park South Driveway				Ryder Street				Total
	from North				from East				from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg				0				0				0	0
Total				0				0				0	

PDI File #: 207450 HH  
 Location: N: Ryder Street S: Ryder Street  
 Location: E: Mirak Mill Park South Driveway  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 4:00 PM  
 End Time: 6:00 PM



Class: Bicycles (on Roadway and Crosswalks)

	Ryder Street							Mirak Mill Park South Driveway							Ryder Street							Total
	from North							from East							from South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total		Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1		
5:00 PM	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	2		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1		
Total	1	0	0	0	0	1	1	1	0	0	0	0	1	0	1	0	0	0	1	3		
Grand Total	1	0	0	0	0	1	1	1	0	0	0	0	1	0	2	0	0	0	2	4		
Approach %	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0					
Total %	25.0	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	50.0	0.0	0.0	0.0	50.0				
Exiting Leg Total	3							0							1							4

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Ryder Street						Mirak Mill Park South Driveway						Ryder Street						Total	
	from North						from East						from South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
5:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
Total Volume	1	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	1	3	
% Approach Total	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250		0.375
Entering Leg	1	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	1	3	
Exiting Leg	2						0						1						3	
Total	3						1						2						6	

PDI File #: 207450 HH  
 Location: N: Ryder Street S: Ryder Street  
 Location: E: Mirak Mill Park South Driveway  
 City, State: Arlington, MA  
 Client: Nitsch Eng/B.Zimolka  
 Site Code: TBD  
 Count Date: Tuesday, February 4, 2020  
 Start Time: 4:00 PM  
 End Time: 6:00 PM  
 Class:



### Pedestrians

	Ryder Street						Mirak Mill Park South Driveway						Ryder Street						Total	
	from North						from East						from South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	1	1	6
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	0	4	3	7	0	0	0	0	1	1	8
Approach %	0	0	0	0	0	0	0	0	0	0	57.143	42.857		0	0	0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	50	37.5	87.5	0	0	0	0	12.5	12.5	
Exiting Leg Total	0						7						1						8	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Ryder Street						Mirak Mill Park South Driveway						Ryder Street						Total
	from North						from East						from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	1	1	6
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	40.0		0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.500	0.625	0.000	0.000	0.000	0.000	0.250	0.250	0.750
Entering Leg	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	1	1	6
Exiting Leg	0						5						1						6
Total	0						10						2						12



ATR A

Volume  
PDI File # 207450 ATR A  
Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			Hourly		
		EB	WB	Bi-Dir	EB	WB	Bi-Dir
2/4/2020	12:00 AM	7	8	4.5	7	11.5	21.5
2/4/2020	12:15 AM	7	8	7.5	5.5	13	19.5
2/4/2020	12:30 AM	4	4	4	4.5	8.5	15
2/4/2020	12:45 AM	6	4	5.5	3	8.5	11
2/4/2020	1:00 AM	2	3	2.5	4	6.5	7
2/4/2020	1:15 AM	4	1	3	1.5	4.5	5.5
2/4/2020	1:30 AM	0	2	0	1.5	1.5	4
2/4/2020	1:45 AM	2	0	1.5	1.5	3	4.5
2/4/2020	2:00 AM	1	2	1	1	2	4.5
2/4/2020	2:15 AM	2	0	1.5	0.5	2	4
2/4/2020	2:30 AM	0	1	0.5	1	1.5	2.5
2/4/2020	2:45 AM	2	0	1.5	0	1.5	5
2/4/2020	3:00 AM	0	0	0.5	0.5	1	7
2/4/2020	3:15 AM	0	1	0	1.5	1.5	8
2/4/2020	3:30 AM	2	2	3	1.5	4.5	13.5
2/4/2020	3:45 AM	5	1	3.5	0.5	4	22.5
2/4/2020	4:00 AM	1	1	1.5	1.5	3	23
2/4/2020	4:15 AM	4	3	5.5	2	7.5	36.5
2/4/2020	4:30 AM	10	8	12	7.5	19.5	50
2/4/2020	4:45 AM	5	9	4	9	13	53.5
2/4/2020	5:00 AM	18	14	15	13.5	28.5	70
2/4/2020	5:15 AM	19	20	19	16.5	35.5	82
2/4/2020	5:30 AM	16	24	15.5	24	39.5	121.5
2/4/2020	5:45 AM	22	31	20.5	26.5	47	189.5
2/4/2020	6:00 AM	32	30	27	29	56	280
2/4/2020	6:15 AM	60	40	58.5	40	98.5	370.5
2/4/2020	6:30 AM	88	39	83.5	38.5	122	429.5
2/4/2020	6:45 AM	108	75	111	77	188	465.5
2/4/2020	7:00 AM	114	96	117.5	88.5	206	484.5
2/4/2020	7:15 AM	116	81	117.5	89.5	207	473.5
2/4/2020	7:30 AM	122	137	119.5	135.5	255	<b>477.5</b>
2/4/2020	7:45 AM	142	145	130	149	279	<b>543</b>
2/4/2020	8:00 AM	109	152	106.5	148.5	255	<b>1020.5</b>
2/4/2020	8:15 AM	109	104	121.5	110	231.5	485.5
2/4/2020	8:30 AM	122	106	127.5	116.5	244	524
2/4/2020	8:45 AM	120	132	115.5	121.5	237	471
2/4/2020	9:00 AM	98	103	104.5	109.5	214	496.5
2/4/2020	9:15 AM	121	87	123	90	213	457.5
2/4/2020	9:30 AM	94	94	101	96.5	197.5	470.5
2/4/2020	9:45 AM	111	109	110	107.5	217.5	437.5
2/4/2020	10:00 AM	97	92	101.5	95.5	197	444
2/4/2020	10:15 AM	79	97	78.5	93	171.5	417.5
2/4/2020	10:30 AM	123	79	115	84.5	199.5	403.5
2/4/2020	10:45 AM	98	101	100.5	97	197.5	438.5
2/4/2020	11:00 AM	88	104	85	98.5	183.5	435.5
2/4/2020	11:15 AM	106	87	107.5	91.5	199	389.5
2/4/2020	11:30 AM	92	110	108.5	106.5	215	391
2/4/2020	11:45 AM	96	113	102	111.5	213.5	392.5
2/4/2020	12:00 PM	125	119	118.5	113	231.5	380.5
2/4/2020	12:15 PM	117	111	123	121	244	370
2/4/2020	12:30 PM	141	110	137	107.5	244.5	379
2/4/2020	12:45 PM	51	99	86	108.5	194.5	373
							752
							779.5
							795
							811
							859
							904
							933.5
							914.5
							796.5
							672.5
							552

Volume

PDI File # 207450 ATR A

Massachusetts Avenue

west of Pine Court

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	2-day Avg			Hourly		
		EB	WB	Bi-Dir	EB	WB	Bi-Dir
2/4/2020	1:00 PM	2	7	55.5	58	113.5	224.5
2/4/2020	1:15 PM	2	17	56	64	120	218
2/4/2020	1:30 PM	5	11	57	67	124	218.5
2/4/2020	1:45 PM	2	11	56	55.5	111.5	221.5
2/4/2020	2:00 PM	2	10	49	64	113	275
2/4/2020	2:15 PM	3	10	56.5	61.5	118	352
2/4/2020	2:30 PM	20	21	60	82	142	434
2/4/2020	2:45 PM	109	117	109.5	127	236.5	495
2/4/2020	3:00 PM	117	120	126	130.5	256.5	511
2/4/2020	3:15 PM	135	130	138.5	125.5	264	514
2/4/2020	3:30 PM	129	100	121	116	237	503.5
2/4/2020	3:45 PM	128	121	125.5	117.5	243	515
2/4/2020	4:00 PM	128	120	129	120	249	526
2/4/2020	4:15 PM	121	98	128	113	241	537
2/4/2020	4:30 PM	130	112	132.5	108	240.5	547
2/4/2020	4:45 PM	147	114	136.5	114	250.5	574
2/4/2020	5:00 PM	127	121	140	126	266	<b>585</b>
2/4/2020	5:15 PM	151	99	138	113.5	251.5	<b>467</b>
2/4/2020	5:30 PM	162	99	159.5	108	267.5	<b>1052</b>
2/4/2020	5:45 PM	145	125	147.5	119.5	267	587
2/4/2020	6:00 PM	134	124	142	120	262	582
2/4/2020	6:15 PM	135	87	133	90	223	437.5
2/4/2020	6:30 PM	139	107	126.5	103	229.5	549
2/4/2020	6:45 PM	119	88	119.5	92	211.5	432.5
2/4/2020	7:00 PM	104	97	100	90.5	190.5	521
2/4/2020	7:15 PM	85	79	92.5	82.5	175	405
2/4/2020	7:30 PM	78	92	77	79.5	156.5	375.5
2/4/2020	7:45 PM	62	75	60	63.5	123.5	368
2/4/2020	8:00 PM	70	76	73.5	74.5	148	344.5
2/4/2020	8:15 PM	53	57	58	64.5	122.5	316
2/4/2020	8:30 PM	61	76	63.5	75.5	139	300
2/4/2020	8:45 PM	48	45	52.5	51	103.5	282
2/4/2020	9:00 PM	47	67	48.5	64	112.5	255
2/4/2020	9:15 PM	44	45	39.5	46.5	86	278
2/4/2020	9:30 PM	33	40	29.5	34.5	64	247.5
2/4/2020	9:45 PM	24	29	24.5	29	53.5	265.5
2/4/2020	10:00 PM	27	28	24.5	26.5	51	222.5
2/4/2020	10:15 PM	28	21	26.5	22	48.5	204
2/4/2020	10:30 PM	21	24	17	18.5	35.5	237
2/4/2020	10:45 PM	16	17	18.5	22.5	41	196
2/4/2020	11:00 PM	11	15	11.5	13.5	25	174
2/4/2020	11:15 PM	15	9	10.5	9	19.5	136.5
2/4/2020	11:30 PM	9	6	10	5.5	15.5	112
2/4/2020	11:45 PM	8	9	6.5	9	15.5	112
2/5/2020	12:00 AM	2	6				105
2/5/2020	12:15 AM	8	3				105
2/5/2020	12:30 AM	4	5				92.5
2/5/2020	12:45 AM	5	2				96
2/5/2020	1:00 AM	3	5				86.5
2/5/2020	1:15 AM	2	2				89.5
2/5/2020	1:30 AM	0	1				73.5
2/5/2020	1:45 AM	1	3				76.5

Volume

PDI File # 207450 ATR A

Massachusetts Avenue

west of Pine Court

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time			2-day Avg					
		EB	WB	EB	WB	Bi-Dir	EB	Hourly WB	Bi-Dir
2/5/2020	2:00 AM	1	0						
2/5/2020	2:15 AM	1	1						
2/5/2020	2:30 AM	1	1						
2/5/2020	2:45 AM	1	0						
2/5/2020	3:00 AM	1	1						
2/5/2020	3:15 AM	0	2						
2/5/2020	3:30 AM	4	1						
2/5/2020	3:45 AM	2	0						
2/5/2020	4:00 AM	2	2						
2/5/2020	4:15 AM	7	1						
2/5/2020	4:30 AM	14	7						
2/5/2020	4:45 AM	3	9						
2/5/2020	5:00 AM	12	13						
2/5/2020	5:15 AM	19	13						
2/5/2020	5:30 AM	15	24						
2/5/2020	5:45 AM	19	22						
2/5/2020	6:00 AM	22	28						
2/5/2020	6:15 AM	57	40						
2/5/2020	6:30 AM	79	38						
2/5/2020	6:45 AM	114	79						
2/5/2020	7:00 AM	121	81						
2/5/2020	7:15 AM	119	98						
2/5/2020	7:30 AM	117	134						
2/5/2020	7:45 AM	118	153						
2/5/2020	8:00 AM	104	145						
2/5/2020	8:15 AM	134	116						
2/5/2020	8:30 AM	133	127						
2/5/2020	8:45 AM	111	111						
2/5/2020	9:00 AM	111	116						
2/5/2020	9:15 AM	125	93						
2/5/2020	9:30 AM	108	99						
2/5/2020	9:45 AM	109	106						
2/5/2020	10:00 AM	106	99						
2/5/2020	10:15 AM	78	89						
2/5/2020	10:30 AM	107	90						
2/5/2020	10:45 AM	103	93						
2/5/2020	11:00 AM	82	93						
2/5/2020	11:15 AM	109	96						
2/5/2020	11:30 AM	125	103						
2/5/2020	11:45 AM	108	110						
2/5/2020	12:00 PM	112	107						
2/5/2020	12:15 PM	129	131						
2/5/2020	12:30 PM	133	105						
2/5/2020	12:45 PM	121	118						
2/5/2020	1:00 PM	109	109						
2/5/2020	1:15 PM	110	111						
2/5/2020	1:30 PM	109	123						
2/5/2020	1:45 PM	110	100						
2/5/2020	2:00 PM	96	118						
2/5/2020	2:15 PM	110	113						
2/5/2020	2:30 PM	100	143						
2/5/2020	2:45 PM	110	137						

## Volume

PDI File # 207450 ATR A

Massachusetts Avenue

west of Pine Court

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	EB	WB	2-day Avg			EB	Hourly	
				EB	WB	Bi-Dir		WB	Bi-Dir
2/5/2020	3:00 PM	135	141						
2/5/2020	3:15 PM	142	121						
2/5/2020	3:30 PM	113	132						
2/5/2020	3:45 PM	123	114						
2/5/2020	4:00 PM	130	120						
2/5/2020	4:15 PM	135	128						
2/5/2020	4:30 PM	135	104						
2/5/2020	4:45 PM	126	114						
2/5/2020	5:00 PM	153	131						
2/5/2020	5:15 PM	125	128						
2/5/2020	5:30 PM	157	117						
2/5/2020	5:45 PM	150	114						
2/5/2020	6:00 PM	150	116						
2/5/2020	6:15 PM	131	93						
2/5/2020	6:30 PM	114	99						
2/5/2020	6:45 PM	120	96						
2/5/2020	7:00 PM	96	84						
2/5/2020	7:15 PM	100	86						
2/5/2020	7:30 PM	76	67						
2/5/2020	7:45 PM	58	52						
2/5/2020	8:00 PM	77	73						
2/5/2020	8:15 PM	63	72						
2/5/2020	8:30 PM	66	75						
2/5/2020	8:45 PM	57	57						
2/5/2020	9:00 PM	50	61						
2/5/2020	9:15 PM	35	48						
2/5/2020	9:30 PM	26	29						
2/5/2020	9:45 PM	25	29						
2/5/2020	10:00 PM	22	25						
2/5/2020	10:15 PM	25	23						
2/5/2020	10:30 PM	13	13						
2/5/2020	10:45 PM	21	28						
2/5/2020	11:00 PM	12	12						
2/5/2020	11:15 PM	6	9						
2/5/2020	11:30 PM	11	5						
2/5/2020	11:45 PM	5	9						

Volume  
PDI File # 207450 ATR A  
Massachusetts Avenue  
west of Pine Court  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			Hourly	Bi-Dir
		EB	WB	Bi-Dir		
Day 1 Tot		6154	5775	11929		
Day 2 Tot		6959	6601	13560		
2-Day Tot		13113	12376	25489		
AVERAGE		6556.5	6188	12744.5		
Dir Dist		51.45%	48.55%			

DATA SUMMARY								
Weekday			Peak Hours					
ADT	12744.5	vpd			AM		PM	
Dir Dist	51.45%	EB		Hour	7:30 AM to 8:30 AM		5:00 PM to 6:00 PM	
For Data Validation:				Volume	1020.5	vph	1052	vph
	EB	WB		Dir Dist	53.21%	WB	55.61%	EB
Day 1 Tot	6154	5775		K	0.0801		0.0825	
Day 2 Tot	6959	6601		Range	6:00 AM to 10:00 AM		3:00 PM to 7:00 PM	

SEASONALLY ADJUSTED DATA SUMMARY: 3% INCREASE								
Weekday			Peak Hours					
ADT	13126.84	vpd			AM		PM	
Dir Dist	51.45%	EB		Hour	7:30 AM to 8:30 AM		5:00 PM to 6:00 PM	
For Data Validation:				Volume	1051.115	vph	1083.56	vph
	EB	WB		Dir Dist	53.21%	WB	55.61%	EB
Day 1 Tot	6339	5948		K	0.0801		0.0825	
Day 2 Tot	7168	6799		Range	6:00 AM to 10:00 AM		3:00 PM to 7:00 PM	

Volume

PDI File # 207450 B

Mirak Mill West Driveway

North of Massachusetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	12:00 AM	0	0	0	0	0	0
2/4/2020	12:15 AM	0	0	0	0	0	0
2/4/2020	12:30 AM	0	0	0	0	0	0
2/4/2020	12:45 AM	0	0	0	0	0	0
2/4/2020	1:00 AM	0	0	0	0	0	0
2/4/2020	1:15 AM	0	0	0	0.5	0	0.5
2/4/2020	1:30 AM	0	0	0	0.5	0	0.5
2/4/2020	1:45 AM	0	0	0	0.5	0	0.5
2/4/2020	2:00 AM	1	0	0.5	0.5	0	0.5
2/4/2020	2:15 AM	0	0	0	0	0	0
2/4/2020	2:30 AM	0	0	0	0	0	0
2/4/2020	2:45 AM	0	0	0	0	0	0
2/4/2020	3:00 AM	0	0	0	0	0	0
2/4/2020	3:15 AM	0	0	0	0	0	0
2/4/2020	3:30 AM	0	0	0	0	0	0
2/4/2020	3:45 AM	0	0	0	0	0	0
2/4/2020	4:00 AM	0	0	0	0	0	0
2/4/2020	4:15 AM	0	0	0	0	0	0
2/4/2020	4:30 AM	0	0	0	0.5	0.5	1
2/4/2020	4:45 AM	0	0	0	1	0.5	1.5
2/4/2020	5:00 AM	0	0	0	5	1	6
2/4/2020	5:15 AM	1	1	0.5	11	2	13
2/4/2020	5:30 AM	0	0	0.5	10.5	4.5	15
2/4/2020	5:45 AM	3	1	4	11	5	16
2/4/2020	6:00 AM	6	0	6	9	5.5	14.5
2/4/2020	6:15 AM	0	2	0	6	5	11
2/4/2020	6:30 AM	1	0	1	10	2.5	12.5
2/4/2020	6:45 AM	1	1	2	12	3	15
2/4/2020	7:00 AM	2	1	3	14.5	3.5	18
2/4/2020	7:15 AM	4	1	4	18.5	4	22.5
2/4/2020	7:30 AM	5	1	3	24	5	29
2/4/2020	7:45 AM	5	2	4.5	28	6	34
2/4/2020	8:00 AM	6	2	7	34.5	6	40.5
2/4/2020	8:15 AM	11	0	9.5	<b>41</b>	<b>7</b>	<b>48</b>
2/4/2020	8:30 AM	5	0	7	39	8	47
2/4/2020	8:45 AM	6	2	11	39	8.5	47.5
2/4/2020	9:00 AM	12	1	13.5	34.5	8	42.5
2/4/2020	9:15 AM	9	3	7.5	26	8.5	34.5
2/4/2020	9:30 AM	6	3	7	20	7	27
2/4/2020	9:45 AM	11	1	6.5	17.5	8	25.5
2/4/2020	10:00 AM	5	1	5	15.5	7.5	23
2/4/2020	10:15 AM	2	1	1.5	15.5	10	25.5
2/4/2020	10:30 AM	7	3	4.5	17	12	29
2/4/2020	10:45 AM	6	0	4.5	18	12	30
2/4/2020	11:00 AM	5	6	5	17.5	15	32.5
2/4/2020	11:15 AM	4	2	3	15.5	14	29.5
2/4/2020	11:30 AM	4	4	5.5	18.5	18.5	37
2/4/2020	11:45 AM	7	4	4	19	22	41
2/4/2020	12:00 PM	3	3	3	18.5	26.5	45
2/4/2020	12:15 PM	5	5	6	24	30.5	54.5
2/4/2020	12:30 PM	4	9	6	24	24.5	48.5
2/4/2020	12:45 PM	4	7	3.5	23.5	21.5	45



Volume

PDI File # 207450 B

Mirak Mill West Driveway

North of Massachusetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time			2-day Avg			Hourly		
		NB	SB	NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	1:00 PM	8	10	8.5	8	16.5	30.5	18.5	49
2/4/2020	1:15 PM	6	2	6	1.5	7.5	25	13	38
2/4/2020	1:30 PM	6	6	5.5	4	9.5	24.5	17	41.5
2/4/2020	1:45 PM	11	5	10.5	5	15.5	22.5	18	40.5
2/4/2020	2:00 PM	3	1	3	2.5	5.5	14	16	30
2/4/2020	2:15 PM	8	8	5.5	5.5	11	15.5	19.5	35
2/4/2020	2:30 PM	5	6	3.5	5	8.5	12	19	31
2/4/2020	2:45 PM	2	3	2	3	5	12.5	18	30.5
2/4/2020	3:00 PM	3	5	4.5	6	10.5	13.5	21.5	35
2/4/2020	3:15 PM	2	5	2	5	7	12.5	21	33.5
2/4/2020	3:30 PM	1	4	4	4	8	12.5	20.5	33
2/4/2020	3:45 PM	2	9	3	6.5	9.5	11	27	38
2/4/2020	4:00 PM	2	4	3.5	5.5	9	10	29	39
2/4/2020	4:15 PM	1	3	2	4.5	6.5	8.5	30.5	39
2/4/2020	4:30 PM	3	8	2.5	10.5	13	9.5	31	40.5
2/4/2020	4:45 PM	2	8	2	8.5	10.5	9	27.5	36.5
2/4/2020	5:00 PM	4	11	2	7	9	8.5	23	31.5
2/4/2020	5:15 PM	2	2	3	5	8	8	24.5	32.5
2/4/2020	5:30 PM	1	6	2	7	9	6.5	22.5	29
2/4/2020	5:45 PM	1	5	1.5	4	5.5	7	17	24
2/4/2020	6:00 PM	2	7	1.5	8.5	10	6.5	18	24.5
2/4/2020	6:15 PM	1	3	1.5	3	4.5	7	10.5	17.5
2/4/2020	6:30 PM	4	2	2.5	1.5	4	7	10	17
2/4/2020	6:45 PM	2	8	1	5	6	6	11	17
2/4/2020	7:00 PM	2	1	2	1	3	6.5	7.5	14
2/4/2020	7:15 PM	2	3	1.5	2.5	4	5	9.5	14.5
2/4/2020	7:30 PM	1	4	1.5	2.5	4	4	8.5	12.5
2/4/2020	7:45 PM	0	2	1.5	1.5	3	3.5	6.5	10
2/4/2020	8:00 PM	0	4	0.5	3	3.5	3	5.5	8.5
2/4/2020	8:15 PM	0	0	0.5	1.5	2	4	3	7
2/4/2020	8:30 PM	1	0	1	0.5	1.5	4.5	1.5	6
2/4/2020	8:45 PM	0	0	1	0.5	1.5	3.5	2	5.5
2/4/2020	9:00 PM	3	0	1.5	0.5	2	3	1.5	4.5
2/4/2020	9:15 PM	0	0	1	0	1	2	1.5	3.5
2/4/2020	9:30 PM	0	0	0	1	1	1	2.5	3.5
2/4/2020	9:45 PM	0	0	0.5	0	0.5	2	1.5	3.5
2/4/2020	10:00 PM	1	0	0.5	0.5	1	1.5	2	3.5
2/4/2020	10:15 PM	0	2	0	1	1	1	2	3
2/4/2020	10:30 PM	2	0	1	0	1	1.5	2	3.5
2/4/2020	10:45 PM	0	1	0	0.5	0.5	0.5	2	2.5
2/4/2020	11:00 PM	0	0	0	0.5	0.5	0.5	1.5	2
2/4/2020	11:15 PM	0	1	0.5	1	1.5			
2/4/2020	11:30 PM	0	0	0	0	0			
2/4/2020	11:45 PM	0	0	0	0	0			
2/5/2020	12:00 AM	0	0						
2/5/2020	12:15 AM	0	0						
2/5/2020	12:30 AM	0	0						
2/5/2020	12:45 AM	0	0						
2/5/2020	1:00 AM	0	0						
2/5/2020	1:15 AM	0	0						
2/5/2020	1:30 AM	0	0						
2/5/2020	1:45 AM	0	0						

## Volume

PDI File # 207450 B

Mirak Mill West Driveway

North of Massachusetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	NB	SB	2-day Avg			NB	Hourly	
				NB	SB	Bi-Dir		SB	Bi-Dir
2/5/2020	2:00 AM	0	0						
2/5/2020	2:15 AM	0	0						
2/5/2020	2:30 AM	0	0						
2/5/2020	2:45 AM	0	0						
2/5/2020	3:00 AM	0	0						
2/5/2020	3:15 AM	0	0						
2/5/2020	3:30 AM	0	0						
2/5/2020	3:45 AM	0	0						
2/5/2020	4:00 AM	0	0						
2/5/2020	4:15 AM	0	0						
2/5/2020	4:30 AM	0	0						
2/5/2020	4:45 AM	0	0						
2/5/2020	5:00 AM	0	0						
2/5/2020	5:15 AM	0	0						
2/5/2020	5:30 AM	1	0						
2/5/2020	5:45 AM	5	0						
2/5/2020	6:00 AM	6	2						
2/5/2020	6:15 AM	0	4						
2/5/2020	6:30 AM	1	1						
2/5/2020	6:45 AM	3	1						
2/5/2020	7:00 AM	4	0						
2/5/2020	7:15 AM	4	0						
2/5/2020	7:30 AM	1	1						
2/5/2020	7:45 AM	4	1						
2/5/2020	8:00 AM	8	0						
2/5/2020	8:15 AM	8	3						
2/5/2020	8:30 AM	9	4						
2/5/2020	8:45 AM	16	1						
2/5/2020	9:00 AM	15	3						
2/5/2020	9:15 AM	6	2						
2/5/2020	9:30 AM	8	2						
2/5/2020	9:45 AM	2	1						
2/5/2020	10:00 AM	5	4						
2/5/2020	10:15 AM	1	1						
2/5/2020	10:30 AM	2	4						
2/5/2020	10:45 AM	3	1						
2/5/2020	11:00 AM	5	4						
2/5/2020	11:15 AM	2	4						
2/5/2020	11:30 AM	7	3						
2/5/2020	11:45 AM	1	3						
2/5/2020	12:00 PM	3	5						
2/5/2020	12:15 PM	7	10						
2/5/2020	12:30 PM	8	5						
2/5/2020	12:45 PM	3	9						
2/5/2020	1:00 PM	9	6						
2/5/2020	1:15 PM	6	1						
2/5/2020	1:30 PM	5	2						
2/5/2020	1:45 PM	10	5						
2/5/2020	2:00 PM	3	4						
2/5/2020	2:15 PM	3	3						
2/5/2020	2:30 PM	2	4						
2/5/2020	2:45 PM	2	3						

Volume  
PDI File # 207450 B  
Mirak Mill West Driveway  
North of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/5/2020	3:00 PM	6	7				
2/5/2020	3:15 PM	2	5				
2/5/2020	3:30 PM	7	4				
2/5/2020	3:45 PM	4	4				
2/5/2020	4:00 PM	5	7				
2/5/2020	4:15 PM	3	6				
2/5/2020	4:30 PM	2	13				
2/5/2020	4:45 PM	2	9				
2/5/2020	5:00 PM	0	3				
2/5/2020	5:15 PM	4	8				
2/5/2020	5:30 PM	3	8				
2/5/2020	5:45 PM	2	3				
2/5/2020	6:00 PM	1	10				
2/5/2020	6:15 PM	2	3				
2/5/2020	6:30 PM	1	1				
2/5/2020	6:45 PM	0	2				
2/5/2020	7:00 PM	2	1				
2/5/2020	7:15 PM	1	2				
2/5/2020	7:30 PM	2	1				
2/5/2020	7:45 PM	3	1				
2/5/2020	8:00 PM	1	2				
2/5/2020	8:15 PM	1	3				
2/5/2020	8:30 PM	1	1				
2/5/2020	8:45 PM	2	1				
2/5/2020	9:00 PM	0	1				
2/5/2020	9:15 PM	2	0				
2/5/2020	9:30 PM	0	2				
2/5/2020	9:45 PM	1	0				
2/5/2020	10:00 PM	0	1				
2/5/2020	10:15 PM	0	0				
2/5/2020	10:30 PM	0	0				
2/5/2020	10:45 PM	0	0				
2/5/2020	11:00 PM	0	1				
2/5/2020	11:15 PM	1	1				
2/5/2020	11:30 PM	0	0				
2/5/2020	11:45 PM	0	0				
		<b>NB</b>	<b>SB</b>	<b>BI-DIR</b>			
Day 1 Tot		245	216	461			
Day 2 Tot		249	218	467			
2-Day Tot		494	434	928			
AVERAGE		247	217	464			
Dir Dist		53.23%	46.77%				

DATA SUMMARY								
Weekday				Peak Hours				
ADT	464	vpd			AM		PM	
Dir Dist	53.23%	NB		Hour	8:15 AM	to 9:15 AM	4:30 PM	to 5:30 PM
For Data Validation:				Volume	48	vph	40.5	vph
	NB	SB		Dir Dist	85.42%	NB	76.54%	SB
Day 1 Tot	245	216		K	0.1034		0.0873	
Day 2 Tot	249	218		Range	6:00 AM to 10:00 AM		3:00 PM to 7:00 PM	

Volume

PDI File # 207450 C

Quinn Road (East Driveway)

north of Massachussetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	12:00 AM	0	0	0	0	0.5	0.5
2/4/2020	12:15 AM	0	0	0	0	0.5	0.5
2/4/2020	12:30 AM	0	0	0.5	0	1	1
2/4/2020	12:45 AM	0	0	0	0	0.5	0.5
2/4/2020	1:00 AM	0	0	0	0	0.5	0.5
2/4/2020	1:15 AM	0	1	0.5	0	0.5	0.5
2/4/2020	1:30 AM	0	0	0	0	0	0
2/4/2020	1:45 AM	0	0	0	0	0	0
2/4/2020	2:00 AM	0	0	0	0	0	0
2/4/2020	2:15 AM	0	0	0	0	0	0
2/4/2020	2:30 AM	0	0	0	0	0	0
2/4/2020	2:45 AM	0	0	0	0	0	0
2/4/2020	3:00 AM	0	0	0	0	0	0
2/4/2020	3:15 AM	0	0	0	0.5	0	0.5
2/4/2020	3:30 AM	0	0	0	0.5	0	0.5
2/4/2020	3:45 AM	0	0	0	0.5	0	0.5
2/4/2020	4:00 AM	0	0	0.5	0.5	0	0.5
2/4/2020	4:15 AM	0	0	0	0	0	0
2/4/2020	4:30 AM	0	0	0	0.5	0	0.5
2/4/2020	4:45 AM	0	0	0	0.5	0	0.5
2/4/2020	5:00 AM	0	0	0	1.5	0	1.5
2/4/2020	5:15 AM	1	0	0.5	2.5	0	2.5
2/4/2020	5:30 AM	0	0	0	8.5	0	8.5
2/4/2020	5:45 AM	1	0	1	13	0.5	13.5
2/4/2020	6:00 AM	1	0	1	19	1.5	20.5
2/4/2020	6:15 AM	6	0	6.5	24.5	1.5	26
2/4/2020	6:30 AM	0	0	4.5	25.5	2	27.5
2/4/2020	6:45 AM	6	1	7	25	2	27
2/4/2020	7:00 AM	5	0	6.5	25	3.5	28.5
2/4/2020	7:15 AM	9	0	7.5	30.5	7	37.5
2/4/2020	7:30 AM	4	1	4	30.5	10.5	41
2/4/2020	7:45 AM	11	3	7	30.5	16.5	47
2/4/2020	8:00 AM	13	2	12	33.5	17	50.5
2/4/2020	8:15 AM	7	4	7.5	30.5	16.5	47
2/4/2020	8:30 AM	4	4	4	32.5	18.5	51
2/4/2020	8:45 AM	7	5	10	<b>35</b>	<b>17</b>	<b>52</b>
2/4/2020	9:00 AM	10	2	9	<b>33</b>	<b>19</b>	<b>52</b>
2/4/2020	9:15 AM	10	5	9.5	31.5	24	55.5
2/4/2020	9:30 AM	1	1	6.5	27	25	52
2/4/2020	9:45 AM	10	5	8	26.5	25	51.5
2/4/2020	10:00 AM	10	9	7.5	21.5	24	45.5
2/4/2020	10:15 AM	4	8	5	18.5	21	39.5
2/4/2020	10:30 AM	10	6	6	21.5	20	41.5
2/4/2020	10:45 AM	6	7	3	22	19.5	41.5
2/4/2020	11:00 AM	2	6	4.5	25	26.5	51.5
2/4/2020	11:15 AM	8	5	8	27.5	28	55.5
2/4/2020	11:30 AM	7	3	6.5	24.5	30	54.5
2/4/2020	11:45 AM	4	12	6	25	30	55
2/4/2020	12:00 PM	10	7	7	35.5	28	63.5
2/4/2020	12:15 PM	5	7	5	33	26	59
2/4/2020	12:30 PM	7	3	7	30.5	26	56.5
2/4/2020	12:45 PM	23	8	16.5	27.5	30.5	58

Volume

PDI File # 207450 C

Quinn Road (East Driveway)

north of Massachussetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	2-day Avg					Hourly		
		NB	SB	NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	1:00 PM	2	4	4.5	4.5	9	16.5	28	44.5
2/4/2020	1:15 PM	1	9	2.5	8	10.5	14	30.5	44.5
2/4/2020	1:30 PM	0	6	4	9	13	15.5	26.5	42
2/4/2020	1:45 PM	0	6	5.5	6.5	12	15	24.5	39.5
2/4/2020	2:00 PM	0	6	2	7	9	12.5	23.5	36
2/4/2020	2:15 PM	1	4	4	4	8	14.5	23	37.5
2/4/2020	2:30 PM	1	7	3.5	7	10.5	16	22.5	38.5
2/4/2020	2:45 PM	4	7	3	5.5	8.5	16.5	20	36.5
2/4/2020	3:00 PM	3	3	4	6.5	10.5	15.5	19.5	35
2/4/2020	3:15 PM	4	3	5.5	3.5	9	15	19.5	34.5
2/4/2020	3:30 PM	4	4	4	4.5	8.5	13	22	35
2/4/2020	3:45 PM	2	4	2	5	7	11	24.5	35.5
2/4/2020	4:00 PM	3	8	3.5	6.5	10	11	24.5	35.5
2/4/2020	4:15 PM	3	4	3.5	6	9.5	10	31	41
2/4/2020	4:30 PM	3	10	2	7	9	9.5	30	39.5
2/4/2020	4:45 PM	3	4	2	5	7	10.5	30.5	41
2/4/2020	5:00 PM	3	16	2.5	13	15.5	9.5	31	40.5
2/4/2020	5:15 PM	2	5	3	5	8	7.5	24.5	32
2/4/2020	5:30 PM	3	7	3	7.5	10.5	4.5	23.5	28
2/4/2020	5:45 PM	1	4	1	5.5	6.5	2	16.5	18.5
2/4/2020	6:00 PM	1	7	0.5	6.5	7	2.5	11.5	14
2/4/2020	6:15 PM	0	4	0	4	4	2	5.5	7.5
2/4/2020	6:30 PM	0	0	0.5	0.5	1	3.5	2.5	6
2/4/2020	6:45 PM	1	0	1.5	0.5	2	4	3.5	7.5
2/4/2020	7:00 PM	0	0	0	0.5	0.5	4.5	6	10.5
2/4/2020	7:15 PM	1	1	1.5	1	2.5	6	9	15
2/4/2020	7:30 PM	1	0	1	1.5	2.5	4.5	11	15.5
2/4/2020	7:45 PM	1	5	2	3	5	3.5	10	13.5
2/4/2020	8:00 PM	2	4	1.5	3.5	5	2	8	10
2/4/2020	8:15 PM	0	1	0	3	3	0.5	4.5	5
2/4/2020	8:30 PM	0	1	0	0.5	0.5	1	1.5	2.5
2/4/2020	8:45 PM	0	1	0.5	1	1.5	1	1.5	2.5
2/4/2020	9:00 PM	0	0	0	0	0	1	1.5	2.5
2/4/2020	9:15 PM	1	0	0.5	0	0.5	1.5	2	3.5
2/4/2020	9:30 PM	0	1	0	0.5	0.5	1	2	3
2/4/2020	9:45 PM	0	0	0.5	1	1.5	1	1.5	2.5
2/4/2020	10:00 PM	1	1	0.5	0.5	1	1	0.5	1.5
2/4/2020	10:15 PM	0	0	0	0	0	0.5	0	0.5
2/4/2020	10:30 PM	0	0	0	0	0	0.5	0.5	1
2/4/2020	10:45 PM	1	0	0.5	0	0.5	0.5	0.5	1
2/4/2020	11:00 PM	0	0	0	0	0	0	0.5	0.5
2/4/2020	11:15 PM	0	1	0	0.5	0.5			
2/4/2020	11:30 PM	0	0	0	0	0			
2/4/2020	11:45 PM	0	0	0	0	0			
2/5/2020	12:00 AM	0	0						
2/5/2020	12:15 AM	0	0						
2/5/2020	12:30 AM	0	1						
2/5/2020	12:45 AM	0	0						
2/5/2020	1:00 AM	0	0						
2/5/2020	1:15 AM	0	0						
2/5/2020	1:30 AM	0	0						
2/5/2020	1:45 AM	0	0						

## Volume

PDI File # 207450 C

Quinn Road (East Driveway)

north of Massachussetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	NB	SB	2-day Avg			NB	Hourly		Bi-Dir
				NB	SB	Bi-Dir		NB	SB	
2/5/2020	2:00 AM	0	0							
2/5/2020	2:15 AM	0	0							
2/5/2020	2:30 AM	0	0							
2/5/2020	2:45 AM	0	0							
2/5/2020	3:00 AM	0	0							
2/5/2020	3:15 AM	0	0							
2/5/2020	3:30 AM	0	0							
2/5/2020	3:45 AM	0	0							
2/5/2020	4:00 AM	1	0							
2/5/2020	4:15 AM	0	0							
2/5/2020	4:30 AM	0	0							
2/5/2020	4:45 AM	0	0							
2/5/2020	5:00 AM	0	0							
2/5/2020	5:15 AM	0	0							
2/5/2020	5:30 AM	0	0							
2/5/2020	5:45 AM	1	0							
2/5/2020	6:00 AM	1	0							
2/5/2020	6:15 AM	7	0							
2/5/2020	6:30 AM	9	1							
2/5/2020	6:45 AM	8	1							
2/5/2020	7:00 AM	8	0							
2/5/2020	7:15 AM	6	1							
2/5/2020	7:30 AM	4	0							
2/5/2020	7:45 AM	3	2							
2/5/2020	8:00 AM	11	5							
2/5/2020	8:15 AM	8	4							
2/5/2020	8:30 AM	4	9							
2/5/2020	8:45 AM	13	1							
2/5/2020	9:00 AM	8	4							
2/5/2020	9:15 AM	9	7							
2/5/2020	9:30 AM	12	9							
2/5/2020	9:45 AM	6	5							
2/5/2020	10:00 AM	5	7							
2/5/2020	10:15 AM	6	6							
2/5/2020	10:30 AM	2	4							
2/5/2020	10:45 AM	0	1							
2/5/2020	11:00 AM	7	4							
2/5/2020	11:15 AM	8	7							
2/5/2020	11:30 AM	6	6							
2/5/2020	11:45 AM	8	10							
2/5/2020	12:00 PM	4	6							
2/5/2020	12:15 PM	5	9							
2/5/2020	12:30 PM	7	6							
2/5/2020	12:45 PM	10	10							
2/5/2020	1:00 PM	7	5							
2/5/2020	1:15 PM	4	7							
2/5/2020	1:30 PM	8	12							
2/5/2020	1:45 PM	11	7							
2/5/2020	2:00 PM	4	8							
2/5/2020	2:15 PM	7	4							
2/5/2020	2:30 PM	6	7							
2/5/2020	2:45 PM	2	4							



## Volume

PDI File # 207450 C

Quinn Road (East Driveway)

north of Massachusetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	NB	SB	NB	2-day Avg		NB	Hourly	
					SB	Bi-Dir		SB	Bi-Dir
2/5/2020	3:00 PM	5	10						
2/5/2020	3:15 PM	7	4						
2/5/2020	3:30 PM	4	5						
2/5/2020	3:45 PM	2	6						
2/5/2020	4:00 PM	4	5						
2/5/2020	4:15 PM	4	8						
2/5/2020	4:30 PM	1	4						
2/5/2020	4:45 PM	1	6						
2/5/2020	5:00 PM	2	10						
2/5/2020	5:15 PM	4	5						
2/5/2020	5:30 PM	3	8						
2/5/2020	5:45 PM	1	7						
2/5/2020	6:00 PM	0	6						
2/5/2020	6:15 PM	0	4						
2/5/2020	6:30 PM	1	1						
2/5/2020	6:45 PM	2	1						
2/5/2020	7:00 PM	0	1						
2/5/2020	7:15 PM	2	1						
2/5/2020	7:30 PM	1	3						
2/5/2020	7:45 PM	3	1						
2/5/2020	8:00 PM	1	3						
2/5/2020	8:15 PM	0	5						
2/5/2020	8:30 PM	0	0						
2/5/2020	8:45 PM	1	1						
2/5/2020	9:00 PM	0	0						
2/5/2020	9:15 PM	0	0						
2/5/2020	9:30 PM	0	0						
2/5/2020	9:45 PM	1	2						
2/5/2020	10:00 PM	0	0						
2/5/2020	10:15 PM	0	0						
2/5/2020	10:30 PM	0	0						
2/5/2020	10:45 PM	0	0						
2/5/2020	11:00 PM	0	0						
2/5/2020	11:15 PM	0	0						
2/5/2020	11:30 PM	0	0						
2/5/2020	11:45 PM	0	0						
		<b>NB</b>	<b>SB</b>	<b>BI-DIR</b>					
Day 1 Tot		255	263	518					
Day 2 Tot		286	287	573					
2-Day Tot		541	550	1091					
AVERAGE		270.5	275	545.5					
Dir Dist		49.59%	50.41%						

DATA SUMMARY								
Weekday				Peak Hours				
ADT	545.5	vph			AM		PM	
Dir Dist	50.41%	SB		Hour	8:45 AM	<b>MULTI</b>	4:15 PM	<b>MULTI</b>
For Data Validation:				Volume	52	vph	41	vph
	NB	SB		Dir Dist	67.31%	NB	75.61%	SB
Day 1 Tot	255	263		K	0.0953		0.0752	
Day 2 Tot	286	287		Range	6:00 AM to 10:00 AM		3:00 PM to 7:00 PM	

Volume  
PDI File # 207450 D  
Forest Street  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	12:00 AM	2	0	2	4	5	9
2/4/2020	12:15 AM	1	0	2	2.5	6	8.5
2/4/2020	12:30 AM	1	2	3	1.5	5	6.5
2/4/2020	12:45 AM	0	2	2	0.5	3	3.5
2/4/2020	1:00 AM	1	0	1.5	0.5	1	1.5
2/4/2020	1:15 AM	0	0	0	0.5	1	1.5
2/4/2020	1:30 AM	0	0	0	0.5	1.5	2
2/4/2020	1:45 AM	0	0	0	0.5	1.5	2
2/4/2020	2:00 AM	1	1	1.5	0.5	1.5	2
2/4/2020	2:15 AM	0	1	0.5	1	0.5	1.5
2/4/2020	2:30 AM	0	0	0	1	0.5	1.5
2/4/2020	2:45 AM	0	0	0	2.5	0.5	3
2/4/2020	3:00 AM	1	0	1	2.5	1	3.5
2/4/2020	3:15 AM	0	1	0.5	2	2	4
2/4/2020	3:30 AM	0	0	1.5	2	3.5	5.5
2/4/2020	3:45 AM	0	0	0.5	1.5	7	8.5
2/4/2020	4:00 AM	0	1	0.5	2	8	10
2/4/2020	4:15 AM	0	2	0	3.5	7.5	11
2/4/2020	4:30 AM	1	3	1	6	8	14
2/4/2020	4:45 AM	0	2	0.5	10.5	10	20.5
2/4/2020	5:00 AM	1	0	2	14.5	16.5	31
2/4/2020	5:15 AM	1	3	2.5	18.5	26	44.5
2/4/2020	5:30 AM	6	5	5.5	22.5	42.5	65
2/4/2020	5:45 AM	7	7	4.5	32.5	60.5	93
2/4/2020	6:00 AM	5	10	6	49	93	142
2/4/2020	6:15 AM	6	17	6.5	63	148.5	211.5
2/4/2020	6:30 AM	13	22	15.5	74	194.5	268.5
2/4/2020	6:45 AM	19	37	21	103.5	252.5	356
2/4/2020	7:00 AM	20	70	20	140	282	422
2/4/2020	7:15 AM	16	67	17.5	172.5	296.5	469
2/4/2020	7:30 AM	52	77	45	<b>189</b>	<b>291</b>	<b>480</b>
2/4/2020	7:45 AM	58	69	57.5	174	256.5	430.5
2/4/2020	8:00 AM	54	79	52.5	144	224.5	368.5
2/4/2020	8:15 AM	26	56	34	112.5	170.5	283
2/4/2020	8:30 AM	28	43	30	90.5	137	227.5
2/4/2020	8:45 AM	27	41	27.5	80	112	192
2/4/2020	9:00 AM	16	27	21	72	97.5	169.5
2/4/2020	9:15 AM	12	34	12	71	91.5	162.5
2/4/2020	9:30 AM	23	21	19.5	76.5	86	162.5
2/4/2020	9:45 AM	22	23	19.5	77.5	85	162.5
2/4/2020	10:00 AM	21	22	20	84	81.5	165.5
2/4/2020	10:15 AM	20	23	17.5	88.5	78.5	167
2/4/2020	10:30 AM	23	23	20.5	91	88	179
2/4/2020	10:45 AM	32	22	26	92	87	179
2/4/2020	11:00 AM	24	21	24.5	85.5	87.5	173
2/4/2020	11:15 AM	23	29	20	88	93.5	181.5
2/4/2020	11:30 AM	22	16	21.5	91	94.5	185.5
2/4/2020	11:45 AM	19	15	19.5	103	98.5	201.5
2/4/2020	12:00 PM	26	18	27	121.5	101	222.5
2/4/2020	12:15 PM	21	30	23	128.5	99.5	228
2/4/2020	12:30 PM	41	23	33.5	144.5	88.5	233
2/4/2020	12:45 PM	43	23	38	143.5	85	228.5

Volume

PDI File # 207450 D

Forest Street

north of Massachusetts Ave

City, State: Arlington, MA

Client: Nitsch Eng/B.Zimolka

Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	1:00 PM	38	24	34	21.5	55.5	148.5
2/4/2020	1:15 PM	60	23	39	20	59	152
2/4/2020	1:30 PM	42	22	32.5	20.5	53	168.5
2/4/2020	1:45 PM	74	22	43	23.5	66.5	197
2/4/2020	2:00 PM	49	20	37.5	20.5	58	202.5
2/4/2020	2:15 PM	67	26	55.5	25.5	81	224.5
2/4/2020	2:30 PM	72	30	61	26	87	219
2/4/2020	2:45 PM	45	25	48.5	30.5	79	211
2/4/2020	3:00 PM	57	26	59.5	25	84.5	219.5
2/4/2020	3:15 PM	45	22	50	23	73	213
2/4/2020	3:30 PM	37	20	53	23	76	232.5
2/4/2020	3:45 PM	49	17	57	21.5	78.5	237.5
2/4/2020	4:00 PM	48	33	53	31.5	84.5	232
2/4/2020	4:15 PM	62	25	69.5	25	94.5	251.5
2/4/2020	4:30 PM	52	32	58	32	90	265
2/4/2020	4:45 PM	43	33	51.5	30.5	82	284.5
2/4/2020	5:00 PM	78	28	72.5	32.5	105	<b>302.5</b>
2/4/2020	5:15 PM	80	24	83	20	103	<b>122.5</b>
2/4/2020	5:30 PM	67	22	77.5	30.5	108	<b>425</b>
2/4/2020	5:45 PM	64	32	69.5	39.5	109	286.5
2/4/2020	6:00 PM	63	28	56.5	41	97.5	131
2/4/2020	6:15 PM	50	29	45	26.5	71.5	137.5
2/4/2020	6:30 PM	35	27	33.5	26.5	60	133.5
2/4/2020	6:45 PM	36	20	35.5	20.5	56	114.5
2/4/2020	7:00 PM	25	17	24.5	14	38.5	87.5
2/4/2020	7:15 PM	19	17	20	17	37	78
2/4/2020	7:30 PM	24	14	25	12.5	37.5	64
2/4/2020	7:45 PM	30	10	24	12.5	36.5	56
2/4/2020	8:00 PM	17	14	19.5	18.5	38	56.5
2/4/2020	8:15 PM	20	21	20	14	34	75
2/4/2020	8:30 PM	16	14	20	11.5	31.5	53.5
2/4/2020	8:45 PM	15	9	15.5	9.5	25	46
2/4/2020	9:00 PM	21	10	18.5	11	29.5	38.5
2/4/2020	9:15 PM	16	9	15.5	6.5	22	31
2/4/2020	9:30 PM	15	4	11	4	15	27
2/4/2020	9:45 PM	9	4	9.5	5.5	15	19.5
2/4/2020	10:00 PM	13	6	7.5	3.5	11	15
2/4/2020	10:15 PM	6	5	5	4	9	14.5
2/4/2020	10:30 PM	3	3	3.5	2	5.5	12
2/4/2020	10:45 PM	4	6	4.5	5	9.5	8
2/4/2020	11:00 PM	4	1	2.5	1	3.5	8.5
2/4/2020	11:15 PM	0	0	0.5	0	0.5	7
2/4/2020	11:30 PM	1	3	2.5	2.5	5	
2/4/2020	11:45 PM	3	3	2.5	3.5	6	
2/5/2020	12:00 AM	2	0				
2/5/2020	12:15 AM	1	2				
2/5/2020	12:30 AM	1	2				
2/5/2020	12:45 AM	0	2				
2/5/2020	1:00 AM	0	2				
2/5/2020	1:15 AM	0	0				
2/5/2020	1:30 AM	0	0				
2/5/2020	1:45 AM	0	0				

Volume  
PDI File # 207450 D  
Forest Street  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	NB	SB	2-day Avg			NB	Hourly	
				NB	SB	Bi-Dir		SB	Bi-Dir
2/5/2020	2:00 AM	0	1						
2/5/2020	2:15 AM	0	0						
2/5/2020	2:30 AM	0	0						
2/5/2020	2:45 AM	0	0						
2/5/2020	3:00 AM	1	0						
2/5/2020	3:15 AM	0	0						
2/5/2020	3:30 AM	3	0						
2/5/2020	3:45 AM	0	1						
2/5/2020	4:00 AM	1	1						
2/5/2020	4:15 AM	0	2						
2/5/2020	4:30 AM	1	4						
2/5/2020	4:45 AM	1	1						
2/5/2020	5:00 AM	3	1						
2/5/2020	5:15 AM	4	2						
2/5/2020	5:30 AM	5	6						
2/5/2020	5:45 AM	2	9						
2/5/2020	6:00 AM	7	10						
2/5/2020	6:15 AM	7	21						
2/5/2020	6:30 AM	18	25						
2/5/2020	6:45 AM	23	44						
2/5/2020	7:00 AM	20	61						
2/5/2020	7:15 AM	19	63						
2/5/2020	7:30 AM	38	86						
2/5/2020	7:45 AM	57	71						
2/5/2020	8:00 AM	51	81						
2/5/2020	8:15 AM	42	63						
2/5/2020	8:30 AM	32	51						
2/5/2020	8:45 AM	28	35						
2/5/2020	9:00 AM	26	25						
2/5/2020	9:15 AM	12	18						
2/5/2020	9:30 AM	16	23						
2/5/2020	9:45 AM	17	24						
2/5/2020	10:00 AM	19	18						
2/5/2020	10:15 AM	15	18						
2/5/2020	10:30 AM	18	19						
2/5/2020	10:45 AM	20	18						
2/5/2020	11:00 AM	25	13						
2/5/2020	11:15 AM	17	31						
2/5/2020	11:30 AM	21	24						
2/5/2020	11:45 AM	20	26						
2/5/2020	12:00 PM	28	28						
2/5/2020	12:15 PM	25	32						
2/5/2020	12:30 PM	26	25						
2/5/2020	12:45 PM	33	23						
2/5/2020	1:00 PM	30	19						
2/5/2020	1:15 PM	18	17						
2/5/2020	1:30 PM	23	19						
2/5/2020	1:45 PM	12	25						
2/5/2020	2:00 PM	26	21						
2/5/2020	2:15 PM	44	25						
2/5/2020	2:30 PM	50	22						
2/5/2020	2:45 PM	52	36						

Volume  
PDI File # 207450 D  
Forest Street  
north of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/5/2020	3:00 PM	62	24				
2/5/2020	3:15 PM	55	24				
2/5/2020	3:30 PM	69	26				
2/5/2020	3:45 PM	65	26				
2/5/2020	4:00 PM	58	30				
2/5/2020	4:15 PM	77	25				
2/5/2020	4:30 PM	64	32				
2/5/2020	4:45 PM	60	28				
2/5/2020	5:00 PM	67	37				
2/5/2020	5:15 PM	86	16				
2/5/2020	5:30 PM	88	39				
2/5/2020	5:45 PM	75	47				
2/5/2020	6:00 PM	50	54				
2/5/2020	6:15 PM	40	24				
2/5/2020	6:30 PM	32	26				
2/5/2020	6:45 PM	35	21				
2/5/2020	7:00 PM	24	11				
2/5/2020	7:15 PM	21	17				
2/5/2020	7:30 PM	26	11				
2/5/2020	7:45 PM	18	15				
2/5/2020	8:00 PM	22	23				
2/5/2020	8:15 PM	20	7				
2/5/2020	8:30 PM	24	9				
2/5/2020	8:45 PM	16	10				
2/5/2020	9:00 PM	16	12				
2/5/2020	9:15 PM	15	4				
2/5/2020	9:30 PM	7	4				
2/5/2020	9:45 PM	10	7				
2/5/2020	10:00 PM	2	1				
2/5/2020	10:15 PM	4	3				
2/5/2020	10:30 PM	4	1				
2/5/2020	10:45 PM	5	4				
2/5/2020	11:00 PM	1	1				
2/5/2020	11:15 PM	1	0				
2/5/2020	11:30 PM	4	2				
2/5/2020	11:45 PM	2	4				
		<b>NB</b>	<b>SB</b>	<b>BI-DIR</b>			
Day 1 Tot		2309	1768	4077			
Day 2 Tot		2185	1821	4006			
2-Day Tot		4494	3589	8083			
AVERAGE		2247	1794.5	4041.5			
Dir Dist		55.60%	44.40%				

DATA SUMMARY								
Weekday			Peak Hours					
ADT	4041.5	vpd		AM		PM		
Dir Dist	55.60%	NB		Hour	7:30 AM to 8:30 AM	5:00 PM	to 6:00 PM	
For Data Validation:				Volume	480	vph	425	vph
	NB	SB		Dir Dist	60.63%	SB	71.18%	NB
Day 1 Tot	2309	1768		K	0.1188		0.1052	
Day 2 Tot	2185	1821		Range	6:00 AM to 10:00 AM		3:00 PM to 7:00 PM	

Volume  
PDI File # 207450 E  
Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	12:00 AM	0	0	0	0.5	0	0.5
2/4/2020	12:15 AM	0	0	0.5	0.5	0	0.5
2/4/2020	12:30 AM	0	0	0	0	0	0
2/4/2020	12:45 AM	0	0	0	0	0	0
2/4/2020	1:00 AM	0	0	0	0	0	0
2/4/2020	1:15 AM	0	0	0	0	0	0
2/4/2020	1:30 AM	0	0	0	0	0	0
2/4/2020	1:45 AM	0	0	0	0	0	0
2/4/2020	2:00 AM	0	0	0	0	0	0
2/4/2020	2:15 AM	0	0	0	0	0	0
2/4/2020	2:30 AM	0	0	0	0	0	0
2/4/2020	2:45 AM	0	0	0	0	0	0
2/4/2020	3:00 AM	0	0	0	0	0	0
2/4/2020	3:15 AM	0	0	0	0	0	0
2/4/2020	3:30 AM	0	0	0	0	0	0
2/4/2020	3:45 AM	0	0	0	1	0	1
2/4/2020	4:00 AM	0	0	0	1	0	1
2/4/2020	4:15 AM	0	0	0	1	0	1
2/4/2020	4:30 AM	1	0	1	1	0	1
2/4/2020	4:45 AM	0	0	0	0	0	0
2/4/2020	5:00 AM	0	0	0	0	1	1
2/4/2020	5:15 AM	0	0	0	0.5	1	1.5
2/4/2020	5:30 AM	0	0	0	3	1	4
2/4/2020	5:45 AM	0	1	1	3.5	1	4.5
2/4/2020	6:00 AM	1	0	0.5	3.5	1.5	5
2/4/2020	6:15 AM	3	0	2.5	6	4.5	10.5
2/4/2020	6:30 AM	0	0	0.5	7	8.5	15.5
2/4/2020	6:45 AM	0	1	1.5	18	22	40
2/4/2020	7:00 AM	3	4	3	<b>35</b>	<b>35.5</b>	<b>70.5</b>
2/4/2020	7:15 AM	3	3	3.5	33.5	35	68.5
2/4/2020	7:30 AM	9	12	11.5	34	32	66
2/4/2020	7:45 AM	17	15	17	28.5	18.5	47
2/4/2020	8:00 AM	1	4	1.5	15.5	5	20.5
2/4/2020	8:15 AM	3	1	4	16	3.5	19.5
2/4/2020	8:30 AM	6	0	6	15	3.5	18.5
2/4/2020	8:45 AM	5	2	4	11.5	4	15.5
2/4/2020	9:00 AM	2	0	2	8.5	4.5	13
2/4/2020	9:15 AM	3	1	3	7	4.5	11.5
2/4/2020	9:30 AM	3	0	2.5	4	4.5	8.5
2/4/2020	9:45 AM	1	3	1	2.5	4	6.5
2/4/2020	10:00 AM	1	1	0.5	2.5	3	5.5
2/4/2020	10:15 AM	0	0	0	2	2.5	4.5
2/4/2020	10:30 AM	0	0	1	3	3	6
2/4/2020	10:45 AM	0	0	1	2.5	5.5	8
2/4/2020	11:00 AM	0	1	0	3	6	9
2/4/2020	11:15 AM	2	3	1	5.5	8	13.5
2/4/2020	11:30 AM	0	2	0.5	8	7.5	15.5
2/4/2020	11:45 AM	2	1	1.5	13	6.5	19.5
2/4/2020	12:00 PM	5	3	2.5	13.5	28.5	42
2/4/2020	12:15 PM	3	0	3.5	17	53	70
2/4/2020	12:30 PM	6	2	5.5	19	98	117
2/4/2020	12:45 PM	2	47	2	18.5	134.5	153



Volume  
PDI File # 207450 E  
Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			Hourly		
		NB	SB	Bi-Dir	NB	SB	Bi-Dir
2/4/2020	1:00 PM	9	54	6	27	33	22
2/4/2020	1:15 PM	10	91	5.5	46	51.5	21.5
2/4/2020	1:30 PM	8	76	5	38	43	24
2/4/2020	1:45 PM	11	59	5.5	30	35.5	33
2/4/2020	2:00 PM	9	58	5.5	29.5	35	34.5
2/4/2020	2:15 PM	14	77	8	40.5	48.5	34
2/4/2020	2:30 PM	20	38	14	20.5	34.5	28.5
2/4/2020	2:45 PM	8	2	7	1.5	8.5	23
2/4/2020	3:00 PM	6	2	5	2.5	7.5	19
2/4/2020	3:15 PM	1	1	2.5	0.5	3	16.5
2/4/2020	3:30 PM	9	0	8.5	1.5	10	<b>18</b>
2/4/2020	3:45 PM	2	1	3	2	5	11.5
2/4/2020	4:00 PM	1	3	2.5	2.5	5	9
2/4/2020	4:15 PM	4	3	4	3	7	9
2/4/2020	4:30 PM	1	1	2	2	4	7.5
2/4/2020	4:45 PM	0	0	0.5	0.5	1	8
2/4/2020	5:00 PM	1	0	2.5	1.5	4	13
2/4/2020	5:15 PM	3	3	2.5	2	4.5	12.5
2/4/2020	5:30 PM	3	1	2.5	2	4.5	11
2/4/2020	5:45 PM	5	6	5.5	4	9.5	9
2/4/2020	6:00 PM	3	1	2	0.5	2.5	6
2/4/2020	6:15 PM	1	0	1	1	2	5
2/4/2020	6:30 PM	1	2	0.5	1	1.5	5.5
2/4/2020	6:45 PM	4	0	2.5	1	3.5	5.5
2/4/2020	7:00 PM	1	1	1	0.5	1.5	3
2/4/2020	7:15 PM	1	0	1.5	1	2.5	3.5
2/4/2020	7:30 PM	1	1	0.5	0.5	1	2.5
2/4/2020	7:45 PM	0	1	0	0.5	0.5	2.5
2/4/2020	8:00 PM	1	0	1.5	1	2.5	2.5
2/4/2020	8:15 PM	0	2	0.5	1	1.5	2.5
2/4/2020	8:30 PM	1	1	0.5	1	1.5	2
2/4/2020	8:45 PM	0	0	0	0	0	1.5
2/4/2020	9:00 PM	1	1	1.5	0.5	2	2
2/4/2020	9:15 PM	0	1	0	0.5	0.5	1
2/4/2020	9:30 PM	0	0	0	0	0	1
2/4/2020	9:45 PM	0	0	0.5	0	0.5	1
2/4/2020	10:00 PM	1	1	0.5	1	1.5	0.5
2/4/2020	10:15 PM	0	0	0	0.5	0.5	0
2/4/2020	10:30 PM	0	0	0	0	0	0
2/4/2020	10:45 PM	0	0	0	0	0	0
2/4/2020	11:00 PM	0	0	0	0	0	0
2/4/2020	11:15 PM	0	0	0	0	0	0
2/4/2020	11:30 PM	0	0	0	0	0	0
2/4/2020	11:45 PM	0	0	0	0	0	0
2/5/2020	12:00 AM	0	0				
2/5/2020	12:15 AM	1	0				
2/5/2020	12:30 AM	0	0				
2/5/2020	12:45 AM	0	0				
2/5/2020	1:00 AM	0	0				
2/5/2020	1:15 AM	0	0				
2/5/2020	1:30 AM	0	0				
2/5/2020	1:45 AM	0	0				

Volume  
PDI File # 207450 E  
Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	NB	SB	2-day Avg			NB	Hourly		Bi-Dir
				NB	SB	Bi-Dir		NB	SB	
2/5/2020	2:00 AM	0	0							
2/5/2020	2:15 AM	0	0							
2/5/2020	2:30 AM	0	0							
2/5/2020	2:45 AM	0	0							
2/5/2020	3:00 AM	0	0							
2/5/2020	3:15 AM	0	0							
2/5/2020	3:30 AM	0	0							
2/5/2020	3:45 AM	0	0							
2/5/2020	4:00 AM	0	0							
2/5/2020	4:15 AM	0	0							
2/5/2020	4:30 AM	1	0							
2/5/2020	4:45 AM	0	0							
2/5/2020	5:00 AM	0	0							
2/5/2020	5:15 AM	0	0							
2/5/2020	5:30 AM	0	0							
2/5/2020	5:45 AM	0	1							
2/5/2020	6:00 AM	0	0							
2/5/2020	6:15 AM	2	0							
2/5/2020	6:30 AM	1	0							
2/5/2020	6:45 AM	0	2							
2/5/2020	7:00 AM	3	2							
2/5/2020	7:15 AM	4	5							
2/5/2020	7:30 AM	14	15							
2/5/2020	7:45 AM	17	15							
2/5/2020	8:00 AM	2	1							
2/5/2020	8:15 AM	5	1							
2/5/2020	8:30 AM	6	0							
2/5/2020	8:45 AM	3	1							
2/5/2020	9:00 AM	2	2							
2/5/2020	9:15 AM	3	1							
2/5/2020	9:30 AM	2	1							
2/5/2020	9:45 AM	1	1							
2/5/2020	10:00 AM	0	1							
2/5/2020	10:15 AM	0	2							
2/5/2020	10:30 AM	2	0							
2/5/2020	10:45 AM	2	2							
2/5/2020	11:00 AM	0	0							
2/5/2020	11:15 AM	0	0							
2/5/2020	11:30 AM	1	3							
2/5/2020	11:45 AM	1	2							
2/5/2020	12:00 PM	0	2							
2/5/2020	12:15 PM	4	2							
2/5/2020	12:30 PM	5	1							
2/5/2020	12:45 PM	2	0							
2/5/2020	1:00 PM	3	0							
2/5/2020	1:15 PM	1	1							
2/5/2020	1:30 PM	2	0							
2/5/2020	1:45 PM	0	1							
2/5/2020	2:00 PM	2	1							
2/5/2020	2:15 PM	2	4							
2/5/2020	2:30 PM	8	3							
2/5/2020	2:45 PM	6	1							

Volume  
PDI File # 207450 E  
Burton Street  
south of Massachusetts Ave  
City, State: Arlington, MA  
Client: Nitsch Eng/B.Zimolka  
Site Code: TBD

Date	Time	2-day Avg			NB	Hourly	Bi-Dir
		NB	SB	Bi-Dir		SB	
2/5/2020	3:00 PM	4	3				
2/5/2020	3:15 PM	4	0				
2/5/2020	3:30 PM	8	3				
2/5/2020	3:45 PM	4	3				
2/5/2020	4:00 PM	4	2				
2/5/2020	4:15 PM	4	3				
2/5/2020	4:30 PM	3	3				
2/5/2020	4:45 PM	1	1				
2/5/2020	5:00 PM	4	3				
2/5/2020	5:15 PM	2	1				
2/5/2020	5:30 PM	2	3				
2/5/2020	5:45 PM	6	2				
2/5/2020	6:00 PM	1	0				
2/5/2020	6:15 PM	1	2				
2/5/2020	6:30 PM	0	0				
2/5/2020	6:45 PM	1	2				
2/5/2020	7:00 PM	1	0				
2/5/2020	7:15 PM	2	2				
2/5/2020	7:30 PM	0	0				
2/5/2020	7:45 PM	0	0				
2/5/2020	8:00 PM	2	2				
2/5/2020	8:15 PM	1	0				
2/5/2020	8:30 PM	0	1				
2/5/2020	8:45 PM	0	0				
2/5/2020	9:00 PM	2	0				
2/5/2020	9:15 PM	0	0				
2/5/2020	9:30 PM	0	0				
2/5/2020	9:45 PM	1	0				
2/5/2020	10:00 PM	0	1				
2/5/2020	10:15 PM	0	1				
2/5/2020	10:30 PM	0	0				
2/5/2020	10:45 PM	0	0				
2/5/2020	11:00 PM	0	0				
2/5/2020	11:15 PM	0	0				
2/5/2020	11:30 PM	0	0				
2/5/2020	11:45 PM	0	0				
		<b>NB</b>	<b>SB</b>	<b>BI-DIR</b>			
Day 1 Tot		223	595	818			
Day 2 Tot		166	112	278			
2-Day Tot		389	707	1096			
AVERAGE		194.5	353.5	548			
Dir Dist		35.49%	64.51%				

DATA SUMMARY								
Weekday				Peak Hours				
ADT	548	vpd		AM			PM	
Dir Dist	64.51%	SB		Hour	7:00 AM to 8:00 AM	3:30 PM to 4:30 PM		
For Data Validation:				Volume	70.5 vph	27 vph		
	NB	SB		Dir Dist	50.35% SB	66.67% NB		
Day 1 Tot	223	595		K	0.1286	0.0493		
Day 2 Tot	166	112		Range	6:00 AM to 10:00 AM	3:00 PM to 7:00 PM		



Appendix B: MassDOT’s 2019 Weekday Seasonal Adjustment Factors



Massachusetts Highway Department  
Statewide Traffic Data Collection  
2019 Weekday Seasonal Factors

Factor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Axle Factor
R1	1.22	1.14	1.12	1.06	1.00	0.96	0.87	0.85	0.96	0.99	1.04	1.12	0.85
R2	0.95	0.96	0.98	0.97	0.97	0.93	0.97	0.94	0.96	0.90	0.92	0.93	0.96
R3	1.15	1.06	1.07	1.00	0.89	0.88	0.89	0.89	0.95	0.92	1.02	1.01	0.97
R4-R7	1.09	1.09	1.11	1.02	0.96	0.92	0.89	0.89	0.99	0.98	1.09	1.13	0.98
U1-Boston	1.03	1.01	0.98	0.94	0.94	0.92	0.95	0.93	0.94	0.94	0.97	1.04	0.96
U1-Essex	1.09	1.06	1.03	0.99	0.94	0.90	0.88	0.86	0.93	0.94	0.99	1.06	0.93
U1-Southeast	1.06	1.05	1.01	0.97	0.95	0.93	0.93	0.90	0.94	0.94	0.98	1.04	0.98
U1-West	1.19	1.14	1.09	0.95	0.92	0.89	0.89	0.86	0.91	0.95	0.97	1.07	0.84
U1-Worcester	1.02	1.04	0.97	0.94	0.93	0.91	0.95	0.91	0.93	0.92	0.95	1.10	0.88
U2	1.01	1.00	0.94	0.93	0.91	0.89	0.93	0.90	0.90	0.91	0.94	1.02	0.99
U3	1.06	1.03	0.98	0.94	0.93	0.91	0.95	0.91	0.92	0.93	0.97	1.00	0.98
U4-U7	1.01	1.00	0.95	0.92	0.88	0.86	0.92	0.91	0.92	0.94	0.99	1.04	0.99
Rec - East	1.04	1.16	1.12	0.98	0.92	0.88	0.77	0.81	0.94	1.02	1.08	1.12	0.99
Rec - West	1.30	1.23	1.32	1.18	0.95	0.82	0.70	0.69	0.97	0.96	1.16	1.15	0.98

Round off:

0-999 = 10

>1000 = 100

U = Urban

R = Rural

1 - Interstate

2 - Freeway and Expressway

3 - Other Principal Arterial

4 - Minor Arterial

5 - Major Collector

6 - Minor Collector

7 - Local Road and Street

**Recreational - East Group** - Cape Cod (all towns) including the town of Plymouth south of Route 3A (stations 7014,7079,7080,7090,7091,7092,7093,7094,7095,7096,7097,7108 and 7178), Martha's Vineyard and Nantucket.

**Recreational - West Group** - Continuous Stations 2 and 189 including stations 1066,1067,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1113,1114,1116,2196,2197 and 2198.





Appendix C: Parking Assessment Calculations



1165R Mass Ave Apartments

1167 Massachusetts Avenue, Arlington, MA

Location: 1167 Massachusetts Avenue (parking lot behind Workbar)

Date: January 29, 2020; January 30, 2020; and February 1, 2020

Parking Lot Count 76

	Time	Occupied Spots	Maximum	Maximum Parking lot utilization %
<b>Weekday morning</b>	6:00 AM - 6:30 AM	1	3	4%
	6:30 AM - 7:00 AM	1		
	7:00 AM - 7:30 AM	3		
	7:30 AM - 8:00 AM	3		
<b>Weekday midday</b>	12:00 PM - 12:30 PM	43	52	68%
	12:30 PM - 1:00 PM	52		
	1:00 PM - 1:30 PM	47		
	1:30 PM - 2:00 PM	45		
<b>Weekday evening</b>	6:00 PM - 6:30 PM	5	5	7%
	6:30 PM - 7:00 PM	3		
	7:00 PM - 7:30 PM	4		
	7:30 PM - 8:00 PM	4		
<b>Saturday mid-morning</b>	9:00 AM - 9:30 AM	3	4	5%
	9:30 AM - 10:00 AM	4		
	10:00 AM - 10:30 AM	4		
	10:30 AM - 11:00 AM	4		

1165R Mass Ave Apartments  
Parking Utilization Assessment

Location: The Legacy at Arlington Center at 438 Massachusetts Avenue  
Date: April 17, 2021; April 20, 2021

Parking Lot Count 155  
Number of Units 132  
Number of Bedrooms 247  
Parking utilization provided 1.17  
Peak occupancy 100  
Peak parking lot occupancy 65%  
Peak utilization/unit 0.76  
Peak utilization/bd 0.40  
Surface parking \$ 125.00  
Garage parking \$ 150.00

**Notes:**  
Garage has 104 available spaces  
Surface has 51 spaces: 49 resident reserved and 2 are 1-hour spaces  
Remote lot: 6 for employees, 3 are rental reserved (not included in count)

	Time		Occupied Spots	Maximum	Maximum Parking lot utilization %	Parking Utilization Reduction
<b>Weekday morning</b>	6:00 AM - 6:30 AM		99	99	64%	
	6:30 AM - 7:00 AM		97			
	7:00 AM - 7:30 AM		97			
	7:30 AM - 8:00 AM		98			
<b>Weekday midday</b>	12:00 PM - 12:30 PM		90	93	60%	-7%
	12:30 PM - 1:00 PM		93			
	1:00 PM - 1:30 PM		91			
	1:30 PM - 2:00 PM		89			
<b>Weekday evening</b>	6:00 PM - 6:30 PM		81	84	54%	
	6:30 PM - 7:00 PM		82			
	7:00 PM - 7:30 PM		84			
	7:30 PM - 8:00 PM		83			
<b>Weekday night</b>	11:00 PM - 11:30 PM		100	100	65%	
	11:30 PM - 12:00 AM		100			
	12:00 AM - 12:30 AM		100			
	12:30 AM - 1:00 AM		100			
<b>Saturday mid-morning</b>	9:00 AM - 9:30 AM		93	94	61%	-6%
	9:30 AM - 10:00 AM		89			
	10:00 AM - 10:30 AM		94			
	10:30 AM - 11:00 AM		89			

1165R Mass Ave Apartments  
Parking Utilization Assessment

Location: Brigham Square Apartments at 30 Mill Street  
Date: January 29, 2020; January 30, 2020; February 1, 2020; April 20, 2021

Parking Lot Count 153  
Number of Units 116  
Number of Bedrooms 179  
Parking utilization provided 1.32  
Peak occupancy 99  
Peak parking lot occupancy 65%  
Peak utilization/unit 0.85  
Peak utilization/bd 0.55  
Surface parking \$ 85.00  
Garage parking \$ 130.00

**Notes:**  
153 Total Spaces  
3 Guest Parkings 20 Min Limit  
1 Guest Accessible parking  
3 Accessible parking  
149 Resident Reserved

	Time	Occupied Spots	Maximum	Maximum Parking lot utilization %	Parking Utilization Reduction
<b>Weekday morning</b> 29-Jan-20	6:00 AM - 6:30 AM	98	99	65%	
	6:30 AM - 7:00 AM	99			
	7:00 AM - 7:30 AM	95			
	7:30 AM - 8:00 AM	88			
<b>Weekday midday</b> 29-Jan-20	12:00 PM - 12:30 PM	69	71	46%	-28%
	12:30 PM - 1:00 PM	71			
	1:00 PM - 1:30 PM	71			
	1:30 PM - 2:00 PM	68			
<b>Weekday evening</b> 30-Jan-20	6:00 PM - 6:30 PM	77	80	52%	
	6:30 PM - 7:00 PM	79			
	7:00 PM - 7:30 PM	80			
	7:30 PM - 8:00 PM	80			
<b>Weekday night</b> 20-Apr-21	11:00 PM - 11:30 PM	91	93	61%	
	11:30 PM - 12:00 AM	92			
	12:00 AM - 12:30 AM	92			
	12:30 AM - 1:00 AM	93			
<b>Saturday mid-morning</b> 1-Feb-20	9:00 AM - 9:30 AM	85	85	56%	-14%
	9:30 AM - 10:00 AM	81			
	10:00 AM - 10:30 AM	76			
	10:30 AM - 11:00 AM	78			

1165R Mass Ave Apartments  
Parking Utilization Assessment

Location: Arlington 360 at 4205 Symmes Circle  
Date: April 19, 2021

Parking Lot Count	282
Number of Units	147
Number of Bedrooms	241
Parking utilization provided	1.92
Total Reserved (occupied) spaces	175
Peak parking lot occupancy	62%
Peak utilization/unit	1.19
Peak utilization/bd	0.73
Surface parking	\$ 75.00
Garage parking	\$ 125.00

<b>Notes:</b> Complete counts could not be obtained due to parking lot security restrictions Parking lot data obtained from management Garage 235 spaces: 69 compact, 9 handicap, 157 regular Surface 47 spaces: 42 resident, 5 guest Townhome spaces: 19 Total units and parking exludes townhomes
---



Location: Arlington 360 at 4105 Symmes Circle

Data Collection Date: April 19, 2021

Total Parking Lot Spaces:	282	Not Including Townhomes
Tenant Garage Spaces:	235	69 Compact; 9 Handicapped; 157 Regular
Tenant Surface Spaces:	47	42 Resident; 5 Guest
Total Reserved Spaces:	175	

Townhome Spaces: 19

Number of Units: 164

Number of Bedrooms: 261

	Units	Rooms
Studio -	15	15
1 BD -	53	53
2 BD -	78	156
3 BD -	18	54
Total	164	278

Surface Parking/Month: \$75

Garage Parking/Month: \$125



Appendix D: Crash Rate Worksheets



Crash Number	City Town Name	Crash Time	Crash Date	Crash Severity	Manner of Collision	Road Surface Condition	Weather Conditions	Intersection
4557234	ARLINGTON	6:11 PM	06/22/2018	Property damage only (none injured)	Angle	Dry	Clear	Forest Street and Ryder Street
4447000	ARLINGTON	8:51 PM	10/27/2017	Not Reported	Rear-end	Dry	Clear	Massachusetts Avenue, Forest Street, Burton Street and Driveway
4188788	ARLINGTON	2:41 PM	05/09/2016	Property damage only (none injured)	Sideswipe, same direction	Dry	Clear	Appleton St and Massachusetts Avenue
4254381	ARLINGTON	5:32 PM	09/27/2016	Property damage only (none injured)	Sideswipe, same direction	Dry	Clear/Clear	Appleton St and Massachusetts Avenue
4339469	ARLINGTON	11:07 PM	03/10/2017	Property damage only (none injured)	Angle	Snow	Snow/Blowing sand, snow	Appleton St and Massachusetts Avenue
4463054	ARLINGTON	10:47 AM	06/23/2016	Not Reported	Sideswipe, same direction	Dry	Clear	Appleton St and Massachusetts Avenue
4470195	ARLINGTON	2:08 PM	12/14/2017	Property damage only (none injured)	Rear-end	Dry	Clear	Appleton St and Massachusetts Avenue
4604590	ARLINGTON	5:27 PM	10/02/2018	Non-fatal injury	Angle	Wet	Rain	Massachusetts Avenue and Pine CT



## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Arlington COUNT DATE : 2/4/2020

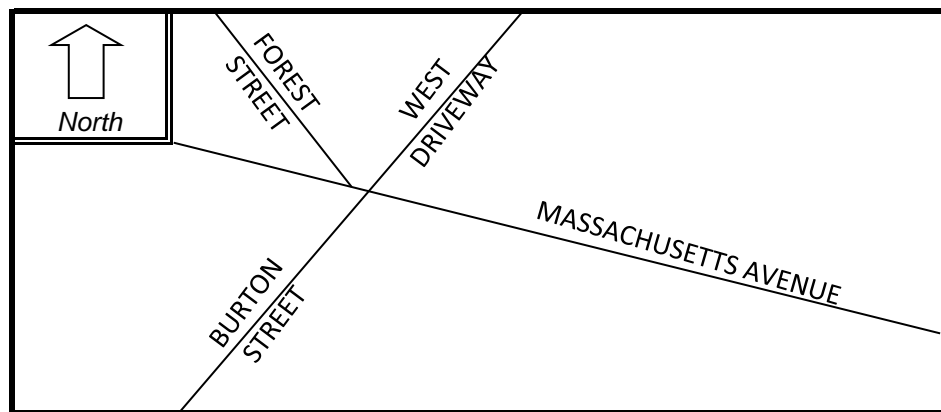
DISTRICT : 4 UNSIGNALIZED : ☒ SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Massachusetts Avenue

MINOR STREET(S) : Forest Street, Burton Street, and Mirak Mill West Driveway

INTERSECTION  
DIAGRAM



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SEB	SB	
PEAK HOURLY VOLUMES (AM/PM) :	492	541	28	281	2	1,344

" K " FACTOR :

**0.08**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**16,800**

TOTAL # OF CRASHES :

**1**

# OF YEARS :

**3**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**0.33**

CRASH RATE CALCULATION :

**0.05**

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : AM Peak used

Project Title & Date: 1167 Massachusetts Ave, 3/5/2021



## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Arlington COUNT DATE : 2/4/2020

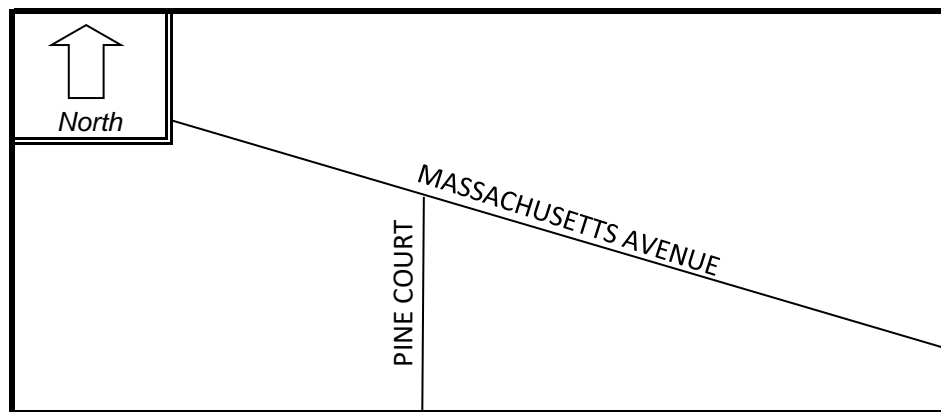
DISTRICT : 4 UNSIGNALIZED : ☒ SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Massachusetts Avenue

MINOR STREET(S) : Pine Court

**INTERSECTION  
DIAGRAM**



**PEAK HOUR VOLUMES**

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :	591	445	2			1,038

" K " FACTOR :

**0.08**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**12,975**

TOTAL # OF CRASHES :

**1**

# OF YEARS :

**3**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**0.33**

**CRASH RATE CALCULATION :**

**0.07**

RATE =

$$\frac{( A * 1,000,000 )}{( V * 365 )}$$

Comments : PM Peak used

Project Title & Date: 1167 Massachusetts Ave, 3/5/2021

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Arlington COUNT DATE : 2/4/2020

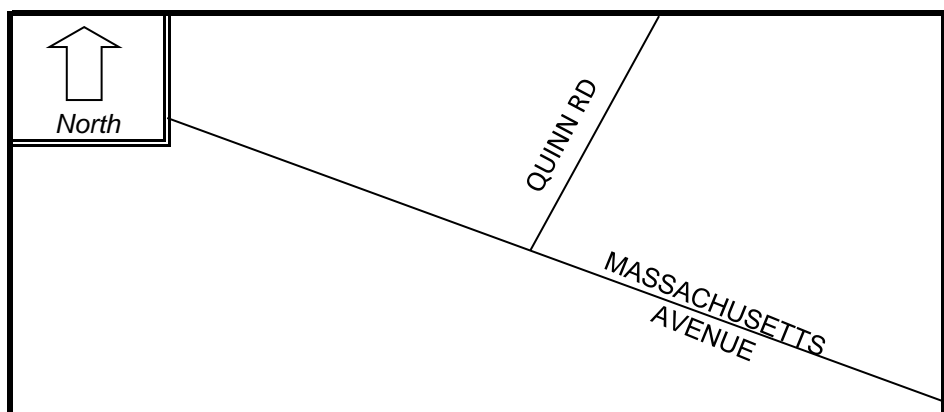
DISTRICT : 4 UNSIGNALIZED : ☒ SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Massachusetts Avenue

MINOR STREET(S) : Quinn Road

**INTERSECTION  
DIAGRAM**



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :	587	431		32		1,050

" K " FACTOR :  INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES :  # OF YEARS :  AVERAGE # OF CRASHES PER YEAR ( A ) :

**CRASH RATE CALCULATION :**

**0.00**

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : PM Peak used

Project Title & Date: 1167 Massachusetts Ave, 3/5/2021

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Arlington COUNT DATE : 2/4/2020

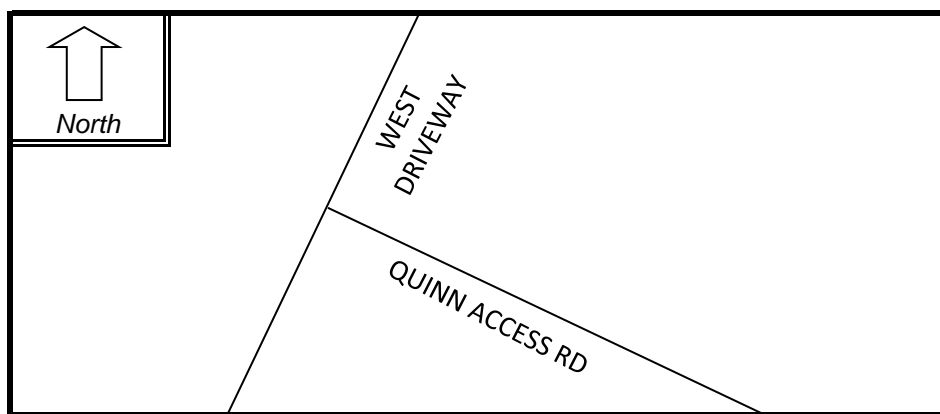
DISTRICT : 4 UNSIGNALIZED : ☒ SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Mirak Mill Innovation Park West Driveway

MINOR STREET(S) : Quinn Access Road

**INTERSECTION  
DIAGRAM**



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :		WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :		11	8	20		39

" K " FACTOR :

**0.08**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**488**

TOTAL # OF CRASHES :

**0**

# OF YEARS :

**3**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**0.00**

**CRASH RATE CALCULATION :**

**0.00**

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : PM Peak used

Project Title & Date: 1167 Massachusetts Ave, 3/5/2021

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Arlington COUNT DATE : 2/4/2020

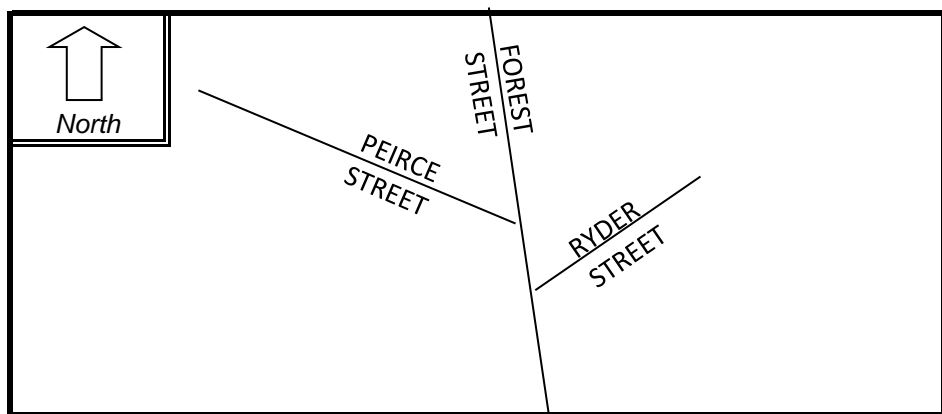
DISTRICT : 4 UNSIGNALIZED : ☒ SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Forest Street

MINOR STREET(S) : Ryder Street and Peirce Street

INTERSECTION  
DIAGRAM



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :	12	18	173	349		552

" K " FACTOR :

**0.08**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**6,900**

TOTAL # OF CRASHES :

**1**

# OF YEARS :

**3**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**0.33**

CRASH RATE CALCULATION :

**0.13**

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : AM Peak used

Project Title & Date: 1167 Massachusetts Ave, 3/5/2021

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Arlington COUNT DATE : 2/4/2020

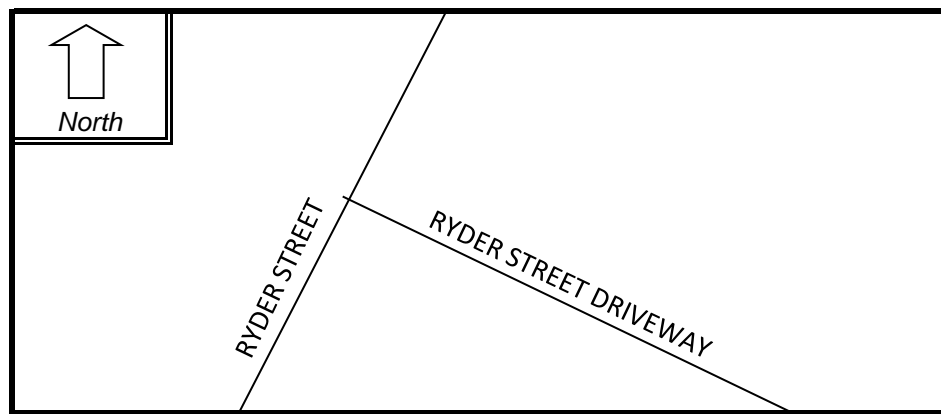
DISTRICT : 4 UNSIGNALIZED : ☒ SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Ryder Street

MINOR STREET(S) : Ryder Street Driveway

**INTERSECTION  
DIAGRAM**



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :		9	17	14		40

" K " FACTOR :  INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES :  # OF YEARS :  AVERAGE # OF CRASHES PER YEAR ( A ) :

**CRASH RATE CALCULATION :**

**0.00**

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : AM Peak used

Project Title & Date: 1167 Massachusetts Ave, 3/5/2021



Appendix E: Traffic Signal Warrant Analyses





## MUTCD Traffic Signal Warrant Summary Worksheet

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: Massachusetts Avenue and Forest Street/Burton Street  
City: Arlington

**100%**  
**Volume Level**

Major Street: Massachusetts Avenue  
Critical Approach Speed: 30 mph  
Lanes: 1 lane

Minor Street: Forest St/ Burton St  
Critical Approach Speed: 25 mph  
Lanes: 1 lane

% Right Turns Included  
From North (SB) 0%  
From East (WB) 0%  
From South (NB) 0%  
From West (EB) 0%

In built-up area of isolated community of < 10,000 population? No  
Total number of approaches at intersection? 4 or more  
Manually set volume level? No

Analysis based on **EXISTING** volume data.

Date	Day of the Week	Time (HH:MM)			
		From	AM / PM	To	AM / PM
2/5/2020	Wednesday	6:00	AM / PM	10:00	PM

Warrant Evaluation Summary	Warrant Met:
<b>Warrant 1: Eight - Hour Vehicular Volume</b>	<b>Yes</b>
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	Yes
Condition C: Combination: 80% of A and B	No
<b>Warrant 2: Four-Hour Volume</b>	<b>Yes</b>
<b>Warrant 3: Peak Hour Volume</b>	<b>Yes</b>
<b>Warrant 4: Pedestrian Volume</b>	<b>N/A</b>
Criterion A: Four-Hour	
Criterion B: Peak-Hour	
<b>Warrant 5: School Crossing</b>	<b>N/A</b>
<b>Warrant 6: Coordinated Signal System</b>	<b>N/A</b>
<b>Warrant 7: Crash Experience</b>	<b>N/A</b>
<b>Warrant 8: Roadway Network</b>	<b>N/A</b>
<b>Warrant 9: Intersection Near a Grade Crossing</b>	<b>N/A</b>

**Warrant Analysis Conducted By:**

Name:

Date:

*Nitsch Engineering*

## Warrant 1: Eight - Hour Vehicular Volume

100%

Warrant Evaluated? Yes

Condition A :		
Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	500	400
Minor Rd. Req	150	120
Number of Hours	2	4

Satisfied? No

Condition B:		
Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	750	600
Minor Rd. Req	75	60
Number of Hours	11	12

Satisfied? Yes

Condition C:		
Combination of A & B at 80%		

Satisfied? No

Warrant Satisfied? Yes

Manually Set To:

6:00 AM		Enter Start Time (Military Time) (HH:MM)			Total
Time Period	From	To	Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	
1	6:00	7:00	457	100	557
2	7:00	8:00	941	281	1222
3	8:00	9:00	981	230	1211
4	9:00	10:00	867	90	957
5	10:00	11:00	765	73	838
6	11:00	12:00	826	94	920
7	12:00	13:00	956	108	1064
8	13:00	14:00	881	80	961
9	14:00	15:00	927	104	1031
10	15:00	16:00	1021	100	1121
11	16:00	17:00	992	115	1107
12	17:00	18:00	1075	139	1214
13	18:00	19:00	919	125	1044
14	19:00	20:00	619	54	673
15	20:00	21:00	540	49	589
16	21:00	22:00	303	27	330

## Warrant 2: Four-Hour Volume

100%

Four hours with highest total volume meeting warrant criteria:

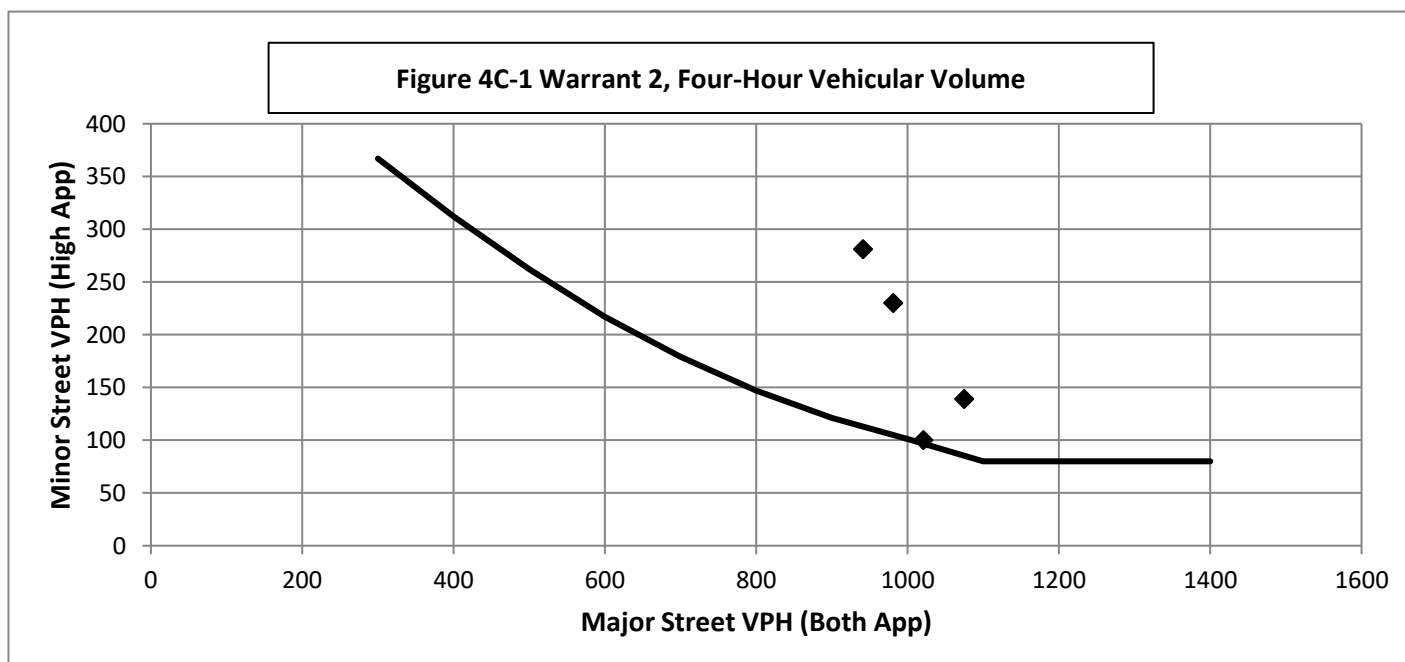
Hour Start	7:00	17:00	8:00	15:00
Major Road Vol.	941	1075	981	1021
Minor Road Vol.	281	139	230	100

Warrant Evaluated? Yes

Number of Hours 6

Warrant Satisfied? Yes

Manually Set To:







## Warrant 1: Eight - Hour Vehicular Volume

**100%**

**Warrant Evaluated? Yes**

<b>Condition A :</b>		
Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	500	400
Minor Rd. Req	150	120
Number of Hours	0	0

**Satisfied? No**

<b>Condition B:</b>		
Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	750	600
Minor Rd. Req	75	60
Number of Hours	0	0

**Satisfied? No**

<b>Condition C:</b>		
Combination of A & B at 80%		

**Satisfied? No**

**Warrant Satisfied? No**

**Manually Set To:**

6:00 AM		Enter Start Time (Military Time) (HH:MM)			Total
Time Period	From	To	Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	
1	6:00	7:00	370	25	395
2	7:00	8:00	932	21	953
3	8:00	9:00	998	36	1034
4	9:00	10:00	828	35	863
5	10:00	11:00	742	13	755
6	11:00	12:00	804	29	833
7	12:00	13:00	900	28	928
8	13:00	14:00	489	28	517
9	14:00	15:00	669	24	693
10	15:00	16:00	979	20	999
11	16:00	17:00	910	25	935
12	17:00	18:00	934	31	965
13	18:00	19:00	810	12	822
14	19:00	20:00	632	6	638
15	20:00	21:00	531	8	539
16	21:00	22:00	348	2	350

## Warrant 2: Four-Hour Volume

**100%**

*Four hours with highest total volume meeting warrant criteria:*

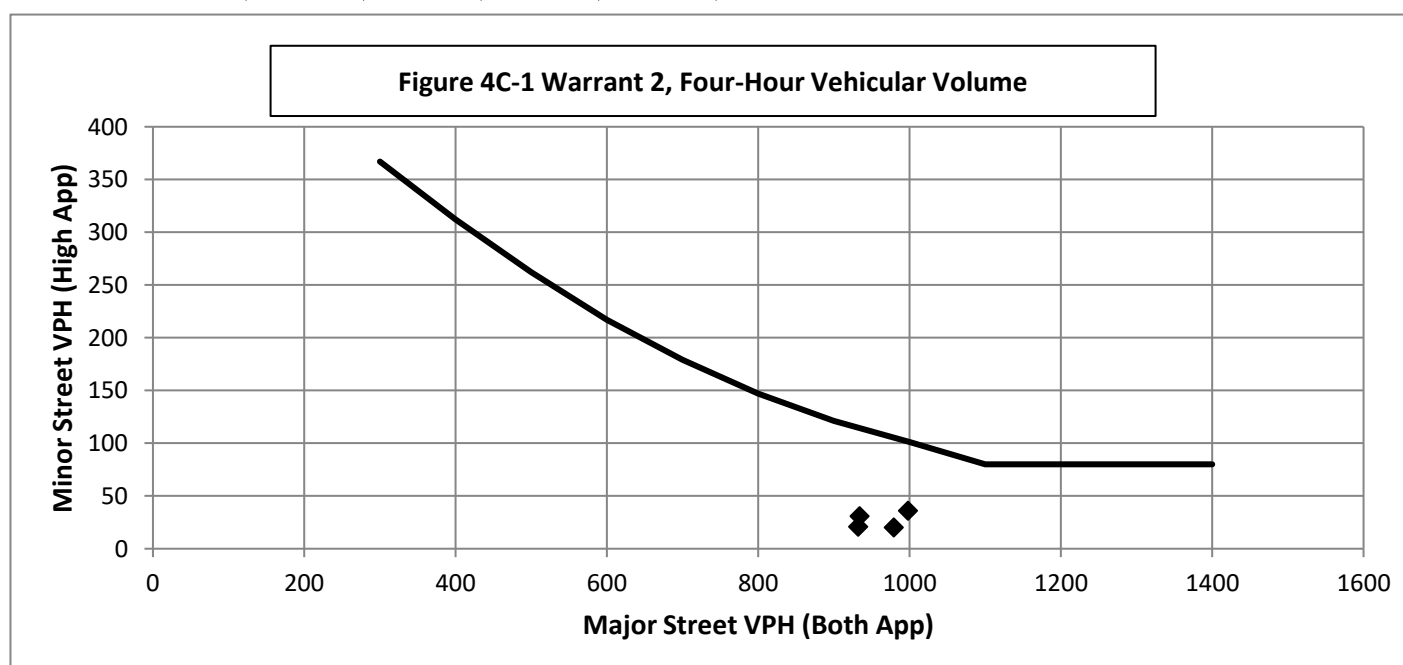
Hour Start	8:00	17:00	15:00	7:00
Major Road Vol.	998	934	979	932
Minor Road Vol.	36	31	20	21

**Warrant Evaluated? Yes**

**Number of Hours 0**

**Warrant Satisfied? No**

**Manually Set To:**









Appendix F: ITE Trip Generation Worksheets







## Multifamily Housing (Mid-Rise) (221)

Person Trip Ends vs: Dwelling Units

On a: Weekday,  
Peak Hour of Adjacent Street Traffic,  
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 7

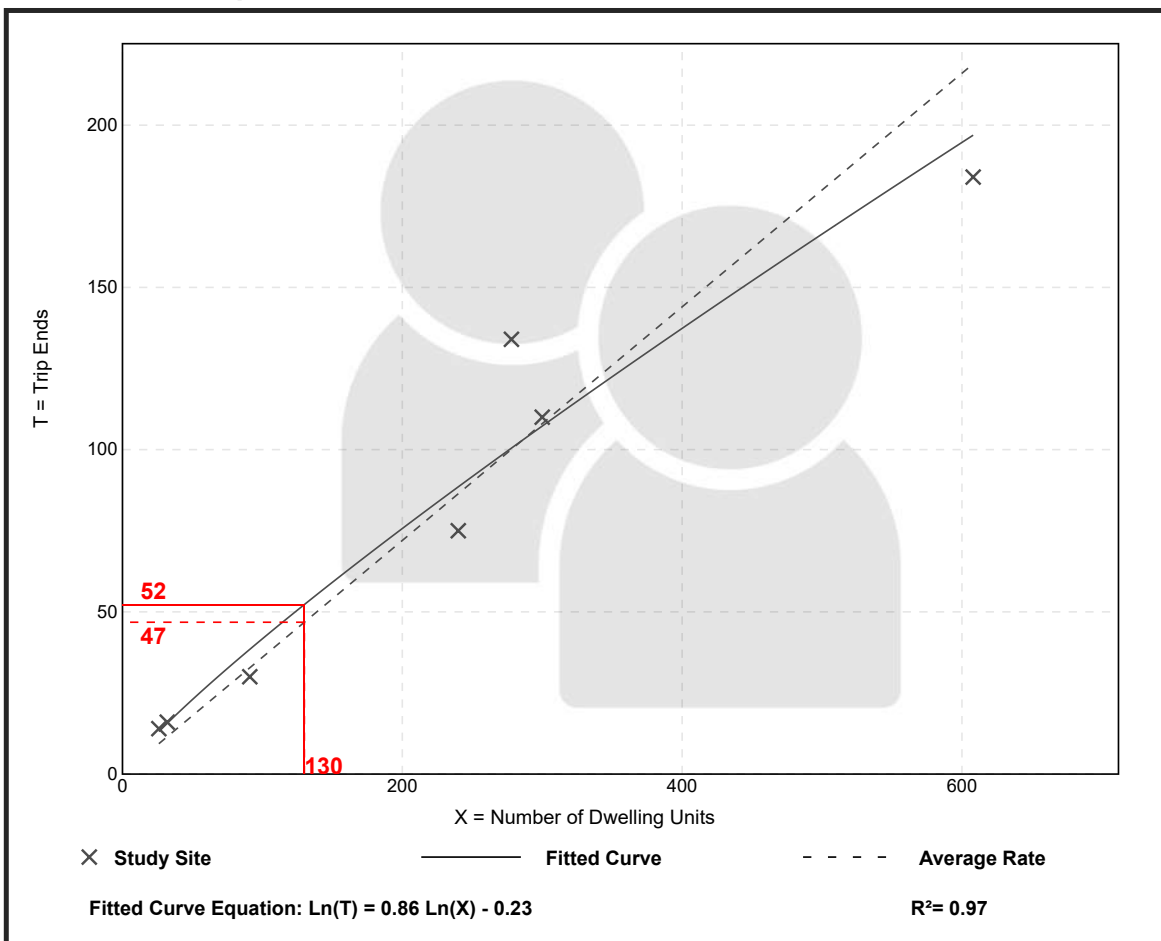
Avg. Num. of Dwelling Units: 225

Directional Distribution: 20% entering, 80% exiting

### Person Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.30 - 0.54	0.08

### Data Plot and Equation









Appendix G: Recombined Delay Worksheets







## 2020 Existing Conditions PM Peak Hour

### Intersection A: Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	0.1	A
<b>B</b>	WB - LTR	Mass Ave (WB)	3.3	A
<b>C</b>	NB - LTR	Appleton St/Pl	17.7	C
<b>D</b>	SB - LTR	Driveway	35.2	E
	<b>Node 2</b>			
<b>E</b>	WB - LTR	Appleton Pl	8.4	A
<b>F</b>	SB - LTR	Mass Ave (EB/WB)	0.6	A
<b>G</b>	NEB - LTR	Appleton St	11.6	B

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL	EB Mass Ave	Driveway	3	A	-	0.1	0.3	EB	444	55.2	0.1	A
EBT	EB Mass Ave	EB Mass Ave	423	A	-	0.1	42.3					
EBR1	EB Mass Ave	Appleton Pl	9	A	F	0.7	6.3					
EBR2	EB Mass Ave	Appleton St	9	A	F	0.7	6.3					
WBL2	WB Mass Ave	Appleton Pl	1	B	F	3.9	3.9	WB	434	1500.6	3.5	A
WBL1	WB Mass Ave	Appleton St	113	B	F	3.9	440.7					
WBT	WB Mass Ave	WB Mass Ave	318	B	-	3.3	1049.4					
WBR	WB Mass Ave	Driveway	2	B	-	3.3	6.6					
NBL2	Appleton Pl	Appleton St	3	-	E	8.4	25.2	NB	26	625.5	24.1	C
NBL1	Appleton Pl	WB Mass Ave	8	C	E	26.1	208.8					
NBT	Appleton Pl	Driveway	1	C	E	26.1	26.1					
NBR	Appleton Pl	EB Mass Ave	14	C	E	26.1	365.4					
SBL2	Driveway	EB Mass Ave	1	D	-	35.2	35.2	SB	5	176.6	35.3	E
SBL1	Driveway	Appleton Pl	0	D	F	35.8	0					
SBR1	Driveway	Appleton St	1	D	F	35.8	35.8					
SBR2	Driveway	WB Mass Ave	3	D	-	35.2	105.6					
NEL1	Appleton St	WB Mass Ave	10	C	G	29.3	293	NE	332	9639.1	29.0	D
NEL2	Appleton St	Driveway	0	C	G	29.3	0					
NER1	Appleton St	EB Mass Ave	317	C	G	29.3	9288.1					
NER2	Appleton St	Appleton Pl	5	-	G	11.6	58					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, NE/NEB = Northeast-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right



**2025 No-Build Conditions AM Peak Hour**

**Intersection A: Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway**

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	0.0	A
<b>B</b>	WB - LTR	Mass Ave (WB)	10.6	B
<b>C</b>	NB - LTR	Appleton St/Pl	26.3	D
<b>D</b>	SB - LTR	Driveway	0.0	A
	<b>Node 2</b>			
<b>E</b>	WB - LTR	Appleton Pl	13.9	B
<b>F</b>	SB - LTR	Mass Ave (EB/WB)	0.9	A
<b>G</b>	NEB - LTR	Appleton St	29.3	D

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL	EB Mass Ave	Driveway	0	A	-	0.0	0	EB	427	45.9	0.1	A
EBT	EB Mass Ave	EB Mass Ave	376	A	-	0.0	0					
EBR1	EB Mass Ave	Appleton Pl	17	A	F	0.9	15.3					
EBR2	EB Mass Ave	Appleton St	34	A	F	0.9	30.6					
WBL2	WB Mass Ave	Appleton Pl	12	B	F	11.5	138	WB	709	7797.1	11.0	B
WBL1	WB Mass Ave	Appleton St	301	B	F	11.5	3461.5					
WBT	WB Mass Ave	WB Mass Ave	396	B	-	10.6	4197.6					
WBR	WB Mass Ave	Driveway	0	B	-	10.6	0					
NBL2	Appleton Pl	Appleton St	39	-	E	13.9	542.1	NB	71	1828.5	25.8	D
NBL1	Appleton Pl	WB Mass Ave	12	C	E	40.2	482.4					
NBT	Appleton Pl	Driveway	0	C	E	40.2	0					
NBR	Appleton Pl	EB Mass Ave	20	C	E	40.2	804					
SBL2	Driveway	EB Mass Ave	1	D	-	0.0	0	SB	1	0.0	0.0	A
SBL1	Driveway	Appleton Pl	0	D	F	0.9	0					
SBR1	Driveway	Appleton St	0	D	F	0.9	0					
SBR2	Driveway	WB Mass Ave	0	D	-	0.0	0					
NEL1	Appleton St	WB Mass Ave	7	C	G	55.6	389.2	NE	176	9548.9	54.3	F
NEL2	Appleton St	Driveway	0	C	G	55.6	0					
NER1	Appleton St	EB Mass Ave	160	C	G	55.6	8896					
NER2	Appleton St	Appleton Pl	9	-	G	29.3	263.7					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, NE/NEB = Northeast-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right



# **2025 No-Build Conditions AM Peak Hour**

## **Intersection B: Massachusetts Avenue and Forest Street/Burton Street/Mirak Mill Innovation Park West Driveway**

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	3.5	A
<b>B</b>	WB - LTR	Mass Ave (WB)	0.3	A
<b>C</b>	NB - LTR	Burton St	17.8	C
<b>D</b>	SB - LTR	Forest St	119.7	F
	<b>Node 2</b>			
<b>E</b>	EB - LT	Mass Ave (EB)	0.7	A
<b>F</b>	WB - TR	Mass Ave (WB)	0.0	A
<b>G</b>	SWB - LR	West Driveway	17.6	C

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL2	EB Mass Ave	Forest St	100	A	-	3.5	350	EB	558	2272.9	4.1	A
EBL1	EB Mass Ave	West Driveway	22	A	E	4.2	92.4					
EBT	EB Mass Ave	EB Mass Ave	435	A	E	4.2	1827					
EBR	EB Mass Ave	Burton St	1	A	-	3.5	3.5					
WBL	WB Mass Ave	Burton St	10	B	F	0.3	3	WB	615	184.5	0.3	A
WBT	WB Mass Ave	WB Mass Ave	491	B	F	0.3	147.3					
WBR1	WB Mass Ave	Forest St	108	B	F	0.3	32.4					
WBR2	WB Mass Ave	West Driveway	6	-	F	0.3	1.8					
NBL2	Burton St	WB Mass Ave	0	C	-	17.8	0	NB	32	585.0	18.3	C
NBL1	Burton St	Forest St	10	C	-	17.8	178					
NBT	Burton St	West Driveway	1	C	E	18.5	18.5					
NBR	Burton St	EB Mass Ave	21	C	E	18.5	388.5					
SBL2	Forest St	West Driveway	0	D	E	120.4	0	SB	310	37157.4	119.9	F
SBL1	Forest St	EB Mass Ave	72	D	E	120.4	8668.8					
SBR1	Forest St	Burton St	24	D	-	119.7	2872.8					
SBR2	Forest St	WB Mass Ave	214	D	-	119.7	25615.8					
SWL	West Driveway	EB Mass Ave	1	-	G	17.6	17.6	SW	2	35.5	17.8	C
SWT	West Driveway	Burton St	0	B	G	17.9	0					
SWR1	West Driveway	WB Mass Ave	0	B	G	17.9	0					
SWR2	West Driveway	Forest St	1	B	G	17.9	17.9					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, SW/SWB = Southwest-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right

## 2025 No-Build Conditions PM Peak Hour

### Intersection A: Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	0.1	A
<b>B</b>	WB - LTR	Mass Ave (WB)	3.6	A
<b>C</b>	NB - LTR	Appleton St/Pl	22.0	C
<b>D</b>	SB - LTR	Driveway	22.3	C
	<b>Node 2</b>			
<b>E</b>	WB - LTR	Appleton Pl	8.4	A
<b>F</b>	SB - LTR	Mass Ave (EB/WB)	0.6	A
<b>G</b>	NEB - LTR	Appleton St	12.3	B

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL	EB Mass Ave	Driveway	3	A	-	0.1	0.3	EB	490	61.0	0.1	A
EBT	EB Mass Ave	EB Mass Ave	467	A	-	0.1	46.7					
EBR1	EB Mass Ave	Appleton Pl	10	A	F	0.7	7					
EBR2	EB Mass Ave	Appleton St	10	A	F	0.7	7					
WBL2	WB Mass Ave	Appleton Pl	1	B	F	4.2	4.2	WB	479	1800.0	3.8	A
WBL1	WB Mass Ave	Appleton St	125	B	F	4.2	525					
WBT	WB Mass Ave	WB Mass Ave	351	B	-	3.6	1263.6					
WBR	WB Mass Ave	Driveway	2	B	-	3.6	7.2					
NBL2	Appleton Pl	Appleton St	3	-	E	8.4	25.2	NB	28	785.2	28.0	D
NBL1	Appleton Pl	WB Mass Ave	9	C	E	30.4	273.6					
NBT	Appleton Pl	Driveway	1	C	E	30.4	30.4					
NBR	Appleton Pl	EB Mass Ave	15	C	E	30.4	456					
SBL2	Driveway	EB Mass Ave	1	D	-	22.3	22.3	SB	5	112.1	22.4	C
SBL1	Driveway	Appleton Pl	0	D	F	22.9	0					
SBR1	Driveway	Appleton St	1	D	F	22.9	22.9					
SBR2	Driveway	WB Mass Ave	3	D	-	22.3	66.9					
NEL1	Appleton St	WB Mass Ave	11	C	G	34.3	377.3	NE	366	12421.8	33.9	D
NEL2	Appleton St	Driveway	0	C	G	34.3	0					
NER1	Appleton St	EB Mass Ave	349	C	G	34.3	11970.7					
NER2	Appleton St	Appleton Pl	6	-	G	12.3	73.8					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, NE/NEB = Northeast-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right

# **2025 No-Build Conditions PM Peak Hour**

## **Intersection B: Massachusetts Avenue and Forest Street/Burton Street/Mirak Mill Innovation Park West Driveway**

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	5.7	A
<b>B</b>	WB - LTR	Mass Ave (WB)	0.1	A
<b>C</b>	NB - LTR	Burton St	18.9	C
<b>D</b>	SB - LTR	Forest St	31.1	D
	<b>Node 2</b>			
<b>E</b>	EB - LT	Mass Ave (EB)	0.2	A
<b>F</b>	WB - TR	Mass Ave (WB)	0.0	A
<b>G</b>	SWB - LR	West Driveway	12.7	B

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL2	EB Mass Ave	Forest St	221	A	-	5.7	1259.7	EB	843	4929.1	5.8	A
EBL1	EB Mass Ave	West Driveway	7	A	E	5.9	41.3					
EBT	EB Mass Ave	EB Mass Ave	613	A	E	5.9	3616.7					
EBR	EB Mass Ave	Burton St	2	A	-	5.7	11.4					
WBL	WB Mass Ave	Burton St	3	B	F	0.1	0.3	WB	500	50.0	0.1	A
WBT	WB Mass Ave	WB Mass Ave	400	B	F	0.1	40					
WBR1	WB Mass Ave	Forest St	95	B	F	0.1	9.5					
WBR2	WB Mass Ave	West Driveway	2	-	F	0.1	0.2					
NBL2	Burton St	WB Mass Ave	1	C	-	18.9	18.9	NB	13	247.5	19.0	C
NBL1	Burton St	Forest St	3	C	-	18.9	56.7					
NBT	Burton St	West Driveway	0	C	E	19.1	0					
NBR	Burton St	EB Mass Ave	9	C	E	19.1	171.9					
SBL2	Forest St	West Driveway	0	D	E	31.3	0	SB	118	3678.2	31.2	D
SBL1	Forest St	EB Mass Ave	42	D	E	31.3	1314.6					
SBR1	Forest St	Burton St	4	D	-	31.1	124.4					
SBR2	Forest St	WB Mass Ave	72	D	-	31.1	2239.2					
SWL	West Driveway	EB Mass Ave	7	-	G	12.7	88.9	SW	26	332.1	12.8	B
SWT	West Driveway	Burton St	0	B	G	12.8	0					
SWR1	West Driveway	WB Mass Ave	13	B	G	12.8	166.4					
SWR2	West Driveway	Forest St	6	B	G	12.8	76.8					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, SW/SWB = Southwest-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right

# **2025 Build Conditions AM Peak Hour**

## **Intersection A: Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway**

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	0.0	A
<b>B</b>	WB - LTR	Mass Ave (WB)	10.6	B
<b>C</b>	NB - LTR	Appleton St/Pl	26.0	D
<b>D</b>	SB - LTR	Driveway	58.1	F
	<b>Node 2</b>			
<b>E</b>	WB - LTR	Appleton Pl	14.0	B
<b>F</b>	SB - LTR	Mass Ave (EB/WB)	0.9	A
<b>G</b>	NEB - LTR	Appleton St	28.7	D

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL	EB Mass Ave	Driveway	0	A	-	0.0	0	EB	424	45.9	0.1	A
EBT	EB Mass Ave	EB Mass Ave	373	A	-	0.0	0					
EBR1	EB Mass Ave	Appleton Pl	17	A	F	0.9	15.3					
EBR2	EB Mass Ave	Appleton St	34	A	F	0.9	30.6					
WBL2	WB Mass Ave	Appleton Pl	12	B	F	11.5	138	WB	717	7883.7	11.0	B
WBL1	WB Mass Ave	Appleton St	303	B	F	11.5	3484.5					
WBT	WB Mass Ave	WB Mass Ave	402	B	-	10.6	4261.2					
WBR	WB Mass Ave	Driveway	0	B	-	10.6	0					
NBL2	Appleton Pl	Appleton St	39	-	E	14.0	546	NB	71	1826.0	25.7	D
NBL1	Appleton Pl	WB Mass Ave	12	C	E	40.0	480					
NBT	Appleton Pl	Driveway	0	C	E	40.0	0					
NBR	Appleton Pl	EB Mass Ave	20	C	E	40.0	800					
SBL2	Driveway	EB Mass Ave	1	D	-	58.1	58.1	SB	1	58.1	58.1	F
SBL1	Driveway	Appleton Pl	0	D	F	59.0	0					
SBR1	Driveway	Appleton St	0	D	F	59.0	0					
SBR2	Driveway	WB Mass Ave	0	D	-	58.1	0					
NEL1	Appleton St	WB Mass Ave	7	C	G	54.7	382.9	NE	173	9229.1	53.3	F
NEL2	Appleton St	Driveway	0	C	G	54.7	0					
NER1	Appleton St	EB Mass Ave	157	C	G	54.7	8587.9					
NER2	Appleton St	Appleton Pl	9	-	G	28.7	258.3					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, NE/NEB = Northeast-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right

# **2025 Build Conditions AM Peak Hour**

## **Intersection B: Massachusetts Avenue and Forest Street/Burton Street/Mirak Mill Innovation Park West Driveway**

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	3.3	A
<b>B</b>	WB - LTR	Mass Ave (WB)	0.3	A
<b>C</b>	NB - LTR	Burton St	17.5	C
<b>D</b>	SB - LTR	Forest St	118.4	F
	<b>Node 2</b>			
<b>E</b>	EB - LT	Mass Ave (EB)	0.6	A
<b>F</b>	WB - TR	Mass Ave (WB)	0.0	A
<b>G</b>	SWB - LR	West Driveway	20.8	C

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL2	EB Mass Ave	Forest St	95	A	-	3.3	313.5	EB	552	2095.2	3.8	A
EBL1	EB Mass Ave	West Driveway	21	A	E	3.9	81.9					
EBT	EB Mass Ave	EB Mass Ave	435	A	E	3.9	1696.5					
EBR	EB Mass Ave	Burton St	1	A	-	3.3	3.3					
WBL	WB Mass Ave	Burton St	10	B	F	0.3	3	WB	616	184.8	0.3	A
WBT	WB Mass Ave	WB Mass Ave	491	B	F	0.3	147.3					
WBR1	WB Mass Ave	Forest St	107	B	F	0.3	32.1					
WBR2	WB Mass Ave	West Driveway	8	-	F	0.3	2.4					
NBL2	Burton St	WB Mass Ave	0	C	-	17.5	0	NB	31	555.1	17.9	C
NBL1	Burton St	Forest St	10	C	-	17.5	175					
NBT	Burton St	West Driveway	1	C	E	18.1	18.1					
NBR	Burton St	EB Mass Ave	20	C	E	18.1	362					
SBL2	Forest St	West Driveway	0	D	E	119.0	0	SB	319	37812.8	118.5	F
SBL1	Forest St	EB Mass Ave	72	D	E	119.0	8568					
SBR1	Forest St	Burton St	24	D	-	118.4	2841.6					
SBR2	Forest St	WB Mass Ave	223	D	-	118.4	26403.2					
SWL	West Driveway	EB Mass Ave	1	-	G	20.8	20.8	SW	2	41.9	21.0	C
SWT	West Driveway	Burton St	0	B	G	21.1	0					
SWR1	West Driveway	WB Mass Ave	0	B	G	21.1	0					
SWR2	West Driveway	Forest St	1	B	G	21.1	21.1					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, SW/SWB = Southwest-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right

# **2025 Build Conditions PM Peak Hour**

## **Intersection A: Massachusetts Avenue and Appleton Street/Appleton Place/Commercial Driveway**

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	0.1	A
<b>B</b>	WB - LTR	Mass Ave (WB)	3.5	A
<b>C</b>	NB - LTR	Appleton St/Pl	22.7	C
<b>D</b>	SB - LTR	Driveway	22.7	C
	<b>Node 2</b>			
<b>E</b>	WB - LTR	Appleton Pl	8.4	A
<b>F</b>	SB - LTR	Mass Ave (EB/WB)	0.6	A
<b>G</b>	NEB - LTR	Appleton St	12.3	B

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL	EB Mass Ave	Driveway	3	A	-	0.1	0.3	EB	498	61.8	0.1	A
EBT	EB Mass Ave	EB Mass Ave	475	A	-	0.1	47.5					
EBR1	EB Mass Ave	Appleton Pl	10	A	F	0.7	7					
EBR2	EB Mass Ave	Appleton St	10	A	F	0.7	7					
WBL2	WB Mass Ave	Appleton Pl	1	B	F	4.1	4.1	WB	480	1755.6	3.7	A
WBL1	WB Mass Ave	Appleton St	125	B	F	4.1	512.5					
WBT	WB Mass Ave	WB Mass Ave	352	B	-	3.5	1232					
WBR	WB Mass Ave	Driveway	2	B	-	3.5	7					
NBL2	Appleton Pl	Appleton St	3	-	E	8.4	25.2	NB	28	802.7	28.7	D
NBL1	Appleton Pl	WB Mass Ave	9	C	E	31.1	279.9					
NBT	Appleton Pl	Driveway	1	C	E	31.1	31.1					
NBR	Appleton Pl	EB Mass Ave	15	C	E	31.1	466.5					
SBL2	Driveway	EB Mass Ave	1	D	-	22.7	22.7	SB	5	114.1	22.8	C
SBL1	Driveway	Appleton Pl	0	D	F	23.3	0					
SBR1	Driveway	Appleton St	1	D	F	23.3	23.3					
SBR2	Driveway	WB Mass Ave	3	D	-	22.7	68.1					
NEL1	Appleton St	WB Mass Ave	11	C	G	35.0	385	NE	370	12813.8	34.6	D
NEL2	Appleton St	Driveway	0	C	G	35.0	0					
NER1	Appleton St	EB Mass Ave	353	C	G	35.0	12355					
NER2	Appleton St	Appleton Pl	6	-	G	12.3	73.8					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, NE/NEB = Northeast-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right

## 2025 Build Conditions PM Peak Hour

### Intersection B: Massachusetts Avenue and Forest Street/Burton Street/Mirak Mill Innovation Park West Driveway

Lane Group Designation	Node-Specific Lane Group	Approach Roadway	Average Delay (s)	Stand-Alone LOS
	<b>Node 1</b>			
<b>A</b>	EB - LTR	Mass Ave (EB)	5.6	A
<b>B</b>	WB - LTR	Mass Ave (WB)	0.1	A
<b>C</b>	NB - LTR	Burton St	18.9	C
<b>D</b>	SB - LTR	Forest St	30.5	D
	<b>Node 2</b>			
<b>E</b>	EB - LT	Mass Ave (EB)	0.5	A
<b>F</b>	WB - TR	Mass Ave (WB)	0.0	A
<b>G</b>	SWB - LR	West Driveway	12.1	B

Overall Movement	From	To	Volume	Lane Group Node 1	Lane Group Node 2	Combined Average Delay (s)	Combined Total Delay (s)	Overall Lane Group	Lane Group Volume	Combined Total Delay (s)	Combined Average Delay (s)	LOS
EBL2	EB Mass Ave	Forest St	221	A	-	5.6	1237.6	EB	854	5097.9	6.0	A
EBL1	EB Mass Ave	West Driveway	18	A	E	6.1	109.8					
EBT	EB Mass Ave	EB Mass Ave	613	A	E	6.1	3739.3					
EBR	EB Mass Ave	Burton St	2	A	-	5.6	11.2					
WBL	WB Mass Ave	Burton St	3	B	F	0.1	0.3	WB	514	51.4	0.1	A
WBT	WB Mass Ave	WB Mass Ave	399	B	F	0.1	39.9					
WBR1	WB Mass Ave	Forest St	95	B	F	0.1	9.5					
WBR2	WB Mass Ave	West Driveway	17	-	F	0.1	1.7					
NBL2	Burton St	WB Mass Ave	1	C	-	18.9	18.9	NB	13	250.2	19.2	C
NBL1	Burton St	Forest St	3	C	-	18.9	56.7					
NBT	Burton St	West Driveway	0	C	E	19.4	0					
NBR	Burton St	EB Mass Ave	9	C	E	19.4	174.6					
SBL2	Forest St	West Driveway	0	D	E	31.0	0	SB	120	3681.0	30.7	D
SBL1	Forest St	EB Mass Ave	42	D	E	31.0	1302					
SBR1	Forest St	Burton St	4	D	-	30.5	122					
SBR2	Forest St	WB Mass Ave	74	D	-	30.5	2257					
SWL	West Driveway	EB Mass Ave	7	-	G	12.1	84.7	SW	26	316.5	12.2	B
SWT	West Driveway	Burton St	0	B	G	12.2	0					
SWR1	West Driveway	WB Mass Ave	13	B	G	12.2	158.6					
SWR2	West Driveway	Forest St	6	B	G	12.2	73.2					

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, SW/SWB = Southwest-bound

L = Left-Turn, T = Through, R = Right, L1 = Bear Left, L2 = Hard Left, R1 = Bear Right, R2 = Hard Right





















# Appendix H: Capacity Analysis



Lanes, Volumes, Timings  
1: Appleton St & Appleton Pl & Massachusetts Ave

















2020 Existing AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	341	46	284	359	0	17	0	163	1	0	0
Future Volume (vph)	0	341	46	284	359	0	17	0	163	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	12	12	12	12	12	12
Grade (%)		0%			0%			-4%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984						0.878				
Flt Protected					0.978			0.995			0.950	
Satd. Flow (prot)	0	1580	0	0	1648	0	0	1678	0	0	1770	0
Flt Permitted					0.978			0.995			0.950	
Satd. Flow (perm)	0	1580	0	0	1648	0	0	1678	0	0	1770	0
Link Speed (mph)		15			15			25			25	
Link Distance (ft)		330			357			73			97	
Travel Time (s)		15.0			16.2			2.0			2.6	
Confl. Peds. (#/hr)	109		11	118		215	11		118	215		109
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.75	0.75	0.75	0.84	0.84	0.84	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	11%	2%	2%	7%	0%	0%	0%	1%	2%	2%	2%
Bus Blockages (#/hr)	8	8	8	8	8	8	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0						
Adj. Flow (vph)	0	455	61	338	427	0	20	0	192	1	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	516	0	0	765	0	0	212	0	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	1.10	0.92	0.92	1.10	0.92	0.97	0.97	0.97	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 81.9%	ICU Level of Service D											
Analysis Period (min) 15												

# HCM Unsignalized Intersection Capacity Analysis










## 1: Appleton St & Appleton Pl & Massachusetts Ave

2020 Existing AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	341	46	284	359	0	17	0	163	1	0	0
Future Volume (Veh/h)	0	341	46	284	359	0	17	0	163	1	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			-4%			0%	
Peak Hour Factor	0.75	0.75	0.75	0.84	0.84	0.84	0.85	0.85	0.85	0.92	0.92	0.92
Hourly flow rate (vph)	0	455	61	338	427	0	20	0	192	1	0	0
Pedestrians		109			215			118			215	
Lane Width (ft)		14.0			14.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		12			24			11			20	
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	642			634			1816	1922	818	2210	1952	751
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	642			634			1816	1922	818	2210	1952	751
tC, single (s)	4.1			4.1			*4.0	6.5	*3.0	*3.0	*3.0	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			*3.0	4.0	*3.0	3.5	4.0	3.3
p0 queue free %	100			60			85	100	66	99	100	100
cM capacity (veh/h)	757			842			131	29	565	86	183	287
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	516	765	212	1								
Volume Left	0	338	20	1								
Volume Right	61	0	192	0								
cSH	757	842	430	86								
Volume to Capacity	0.00	0.40	0.49	0.01								
Queue Length 95th (ft)	0	49	66	1								
Control Delay (s)	0.0	9.0	21.2	47.5								
Lane LOS		A	C	E								
Approach Delay (s)	0.0	9.0	21.2	47.5								
Approach LOS			C	E								
Intersection Summary												
Average Delay				7.6								
Intersection Capacity Utilization				81.9%	ICU Level of Service				D			
Analysis Period (min)				15								
* User Entered Value												










Lanes, Volumes, Timings  
2: Appleton St & Appleton Pl

2020 Existing AM Peak Hour

						
Lane Group	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (vph)	35	29	26	304	151	8
Future Volume (vph)	35	29	26	304	151	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12
Grade (%)	-4%		0%		-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.939		0.876		0.994	
Flt Protected	0.973		0.996		0.955	
Satd. Flow (prot)	1657	0	1628	0	1640	0
Flt Permitted	0.973		0.996		0.955	
Satd. Flow (perm)	1657	0	1628	0	1640	0
Link Speed (mph)	25		25		25	
Link Distance (ft)	178		73		363	
Travel Time (s)	4.9		2.0		9.9	
Confl. Peds. (#/hr)	109	91	91	18	18	109
Confl. Bikes (#/hr)						4
Peak Hour Factor	0.38	0.38	0.84	0.84	0.85	0.85
Heavy Vehicles (%)	6%	0%	0%	2%	1%	0%
Parking (#/hr)					0	0
Adj. Flow (vph)	92	76	31	362	178	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	168	0	393	0	187	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	11		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.02	1.02	1.00	1.00	1.12	0.97
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	58.1%			ICU Level of Service B		
Analysis Period (min)	15					

















# HCM Unsignalized Intersection Capacity Analysis 2: Appleton St & Appleton Pl

2020 Existing AM Peak Hour

						
Movement	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	35	29	26	304	151	8
Future Volume (Veh/h)	35	29	26	304	151	8
Sign Control	Stop		Free		Stop	
Grade	-4%		0%		-4%	
Peak Hour Factor	0.38	0.38	0.84	0.84	0.85	0.85
Hourly flow rate (vph)	92	76	31	362	178	9
Pedestrians	109		91		109	
Lane Width (ft)	11.0		12.0		12.0	
Walking Speed (ft/s)	3.5		3.5		3.5	
Percent Blockage	10		9		10	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	642	200	109		565	461
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	642	200	109		565	461
tC, single (s)	*5.0	*5.0	4.1		*5.0	*5.0
tC, 2 stage (s)						
tF (s)	*3.0	*3.0	2.2		*3.0	*3.0
p0 queue free %	82	91	98		52	99
cM capacity (veh/h)	503	816	1352		370	604
Direction, Lane #	WB 1	SB 1	NE 1			
Volume Total	168	393	187			
Volume Left	0	31	178			
Volume Right	76	362	0			
cSH	609	1352	377			
Volume to Capacity	0.28	0.02	0.50			
Queue Length 95th (ft)	28	2	66			
Control Delay (s)	13.2	0.8	23.6			
Lane LOS	B	A	C			
Approach Delay (s)	13.2	0.8	23.6			
Approach LOS	B		C			
Intersection Summary						
Average Delay			9.3			
Intersection Capacity Utilization			58.1%	ICU Level of Service	B	
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
3: Burton St/Forest St & Massachusetts Ave

















2020 Existing AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	415	1	10	445	98	0	9	19	65	22	194
Future Volume (vph)	91	415	1	10	445	98	0	9	19	65	22	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	12	12	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.976			0.908			0.907	
Flt Protected		0.991			0.999						0.989	
Satd. Flow (prot)	0	1675	0	0	1764	0	0	1553	0	0	1670	0
Flt Permitted		0.991			0.999						0.989	
Satd. Flow (perm)	0	1675	0	0	1764	0	0	1553	0	0	1670	0
Link Speed (mph)		15			25			25			15	
Link Distance (ft)		357			87			283			336	
Travel Time (s)		16.2			2.4			7.7			15.3	
Confl. Peds. (#/hr)	57		56	8		9	56		8	9		57
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.44	0.44	0.44	0.89	0.89	0.89
Heavy Vehicles (%)	3%	9%	0%	0%	6%	1%	0%	0%	0%	3%	0%	2%
Parking (#/hr)	0	0	0				0	0	0			
Adj. Flow (vph)	105	477	1	11	511	113	0	20	43	73	25	218
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	583	0	0	635	0	0	63	0	0	316	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	1.05	0.92	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	93.4%											
Analysis Period (min)	15											
ICU Level of Service F												












# HCM Unsignalized Intersection Capacity Analysis 3: Burton St/Forest St & Massachusetts Ave

2020 Existing AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	415	1	10	445	98	0	9	19	65	22	194
Future Volume (Veh/h)	91	415	1	10	445	98	0	9	19	65	22	194
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.44	0.44	0.44	0.89	0.89	0.89
Hourly flow rate (vph)	105	477	1	11	511	113	0	20	43	73	25	218
Pedestrians		57			9			56			57	
Lane Width (ft)		14.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		6			1			5			5	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	681			534			1620	1446	542	1396	1390	682
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	681			534			1620	1446	542	1396	1390	682
tC, single (s)	4.1			4.1			7.1	*5.0	*5.0	*5.0	*5.0	*5.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	*3.0	*3.0	*3.0	*3.0	*3.0
p0 queue free %	88			99			100	91	93	63	89	60
cM capacity (veh/h)	858			988			34	215	659	198	228	541
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	583	635	63	316								
Volume Left	105	11	0	73								
Volume Right	1	113	43	218								
cSH	858	988	398	358								
Volume to Capacity	0.12	0.01	0.16	0.88								
Queue Length 95th (ft)	10	1	14	214								
Control Delay (s)	3.1	0.3	15.7	57.1								
Lane LOS	A	A	C	F								
Approach Delay (s)	3.1	0.3	15.7	57.1								
Approach LOS			C	F								
Intersection Summary												
Average Delay			13.2									
Intersection Capacity Utilization			93.4%		ICU Level of Service					F		
Analysis Period (min)			15									
* User Entered Value												

Lanes, Volumes, Timings  
4: Massachusetts Ave & West Dr










2020 Existing AM Peak Hour

						
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	22	477	552	6	1	1
Future Volume (vph)	22	477	552	6	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected		0.998			0.976	
Satd. Flow (prot)	0	1585	1720	0	1613	0
Flt Permitted		0.998			0.976	
Satd. Flow (perm)	0	1585	1720	0	1613	0
Link Speed (mph)		25	15		10	
Link Distance (ft)		87	240		169	
Travel Time (s)		2.4	10.9		11.5	
Confl. Peds. (#/hr)	8			8	8	8
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.87	0.87	0.25	0.25
Heavy Vehicles (%)	0%	8%	6%	1%	0%	0%
Parking (#/hr)	0	0	0	0		
Adj. Flow (vph)	25	548	634	7	4	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	573	641	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.14	1.05	0.92	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	55.3%			ICU Level of Service B		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 4: Massachusetts Ave & West Dr

2020 Existing AM Peak Hour

						
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	22	477	552	6	1	1
Future Volume (Veh/h)	22	477	552	6	1	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.25	0.25
Hourly flow rate (vph)	25	548	634	7	4	4
Pedestrians		8	8		8	
Lane Width (ft)		12.0	14.0		10.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	649				1252	654
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	649				1252	654
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
p0 queue free %	97				99	99
cM capacity (veh/h)	941				326	619
Direction, Lane #	EB 1	WB 1	SW 1			
Volume Total	573	641	8			
Volume Left	25	0	4			
Volume Right	0	7	4			
cSH	941	1700	427			
Volume to Capacity	0.03	0.38	0.02			
Queue Length 95th (ft)	2	0	1			
Control Delay (s)	0.7	0.0	13.6			
Lane LOS	A		B			
Approach Delay (s)	0.7	0.0	13.6			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.4			
Intersection Capacity Utilization			55.3%	ICU Level of Service		B
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
5: Pine Ct & Massachusetts Ave










2020 Existing AM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↰	↰	
Traffic Volume (vph)	484	2	0	553	1	7
Future Volume (vph)	484	2	0	553	1	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	12	12
Grade (%)	0%			0%	-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.882	
Flt Protected					0.994	
Satd. Flow (prot)	1506	0	0	1563	1529	0
Flt Permitted					0.994	
Satd. Flow (perm)	1506	0	0	1563	1529	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	240			134	415	
Travel Time (s)	6.5			3.7	11.3	
Confl. Peds. (#/hr)		10	10		10	10
Confl. Bikes (#/hr)		3				
Peak Hour Factor	0.85	0.85	0.88	0.88	0.50	0.50
Heavy Vehicles (%)	9%	0%	0%	5%	0%	0%
Parking (#/hr)	0	0	0	0		
Adj. Flow (vph)	569	2	0	628	2	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	571	0	0	628	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.20	1.05	1.05	1.20	1.12	1.12
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	CBD					
Control Type:	Unsignalized					
Intersection Capacity Utilization	45.2%			ICU Level of Service A		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis










## 5: Pine Ct & Massachusetts Ave

2020 Existing AM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	484	2	0	553	1	7
Future Volume (Veh/h)	484	2	0	553	1	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	-4%	
Peak Hour Factor	0.85	0.85	0.88	0.88	0.50	0.50
Hourly flow rate (vph)	569	2	0	628	2	14
Pedestrians	10			10	10	
Lane Width (ft)	14.0			14.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			581		1218	590
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			581		1218	590
tC, single (s)			4.1		*5.0	*5.0
tC, 2 stage (s)						
tF (s)			2.2		*3.0	*3.0
p0 queue free %			100		99	98
cM capacity (veh/h)			994		345	656
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	571	628	16			
Volume Left	0	0	2			
Volume Right	2	0	14			
cSH	1700	994	589			
Volume to Capacity	0.34	0.00	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	11.3			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	11.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			45.2%	ICU Level of Service		A
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
6: Massachusetts Ave & Quinn Rd










2020 Existing AM Peak Hour

						
Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	28	466	547	10	3	7
Future Volume (vph)	28	466	547	10	3	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.907	
Flt Protected		0.997			0.985	
Satd. Flow (prot)	0	1758	1677	0	1652	0
Flt Permitted		0.997			0.985	
Satd. Flow (perm)	0	1758	1677	0	1652	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		134	384		203	
Travel Time (s)		3.7	10.5		5.5	
Confl. Peds. (#/hr)	10			10	10	10
Confl. Bikes (#/hr)				3		
Peak Hour Factor	0.85	0.85	0.88	0.88	0.62	0.62
Heavy Vehicles (%)	4%	8%	5%	0%	0%	14%
Parking (#/hr)			6	0		
Adj. Flow (vph)	33	548	622	11	5	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	581	633	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		14	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.10	0.92	0.92	0.92
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	60.3%			ICU Level of Service B		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 6: Massachusetts Ave & Quinn Rd










2020 Existing AM Peak Hour

						
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	28	466	547	10	3	7
Future Volume (Veh/h)	28	466	547	10	3	7
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.88	0.88	0.62	0.62
Hourly flow rate (vph)	33	548	622	11	5	11
Pedestrians		10	10		10	
Lane Width (ft)		12.0	14.0		14.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	643				1262	648
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	643				1262	648
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
p0 queue free %	96				98	98
cM capacity (veh/h)	922				317	619
Direction, Lane #	SE 1	NW 1	SW 1			
Volume Total	581	633	16			
Volume Left	33	0	5			
Volume Right	0	11	11			
cSH	922	1700	477			
Volume to Capacity	0.04	0.37	0.03			
Queue Length 95th (ft)	3	0	3			
Control Delay (s)	1.0	0.0	12.8			
Lane LOS	A		B			
Approach Delay (s)	1.0	0.0	12.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization		60.3%		ICU Level of Service		B
Analysis Period (min)		15				
* User Entered Value						



Lanes, Volumes, Timings  
7: West Dr/Mill Brook Br & Quinn Access Rd










2020 Existing AM Peak Hour

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	2	1	18	8	5	2
Future Volume (vph)	2	1	18	8	5	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	9	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966		0.959			
Flt Protected	0.964					0.966
Satd. Flow (prot)	1592	0	1822	0	0	1449
Flt Permitted	0.964					0.966
Satd. Flow (perm)	1592	0	1822	0	0	1449
Link Speed (mph)	25		25			25
Link Distance (ft)	315		169			187
Travel Time (s)	8.6		4.6			5.1
Peak Hour Factor	0.75	0.75	0.61	0.61	0.35	0.35
Heavy Vehicles (%)	0%	0%	0%	0%	20%	0%
Parking (#/hr)	0	0				
Adj. Flow (vph)	3	1	30	13	14	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	43	0	0	20
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.14	1.00	1.00	1.00	1.14	1.14
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	14.5%			ICU Level of Service A		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

















## 7: West Dr/Mill Brook Br & Quinn Access Rd

2020 Existing AM Peak Hour

						
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	2	1	18	8	5	2
Future Volume (Veh/h)	2	1	18	8	5	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.61	0.61	0.35	0.35
Hourly flow rate (vph)	3	1	30	13	14	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	70	36			43	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	70	36			43	
tC, single (s)	6.4	6.2			4.3	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.4	
p0 queue free %	100	100			99	
cM capacity (veh/h)	930	1042			1457	
Direction, Lane #	NW 1	NE 1	SW 1			
Volume Total	4	43	20			
Volume Left	3	0	14			
Volume Right	1	13	0			
cSH	955	1700	1457			
Volume to Capacity	0.00	0.03	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	8.8	0.0	5.3			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	5.3			
Approach LOS	A					
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization			14.5%	ICU Level of Service		A
Analysis Period (min)			15			

















Lanes, Volumes, Timings  
8: Forest St & Peirce St/Ryder St

2020 Existing AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	1	8	0	3	3	171	9	10	269	63
Future Volume (vph)	10	0	1	8	0	3	3	171	9	10	269	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.986			0.966			0.993			0.975	
Flt Protected		0.957			0.964			0.999			0.998	
Satd. Flow (prot)	0	1733	0	0	1440	0	0	1827	0	0	1767	0
Flt Permitted		0.957			0.964			0.999			0.998	
Satd. Flow (perm)	0	1733	0	0	1440	0	0	1827	0	0	1767	0
Link Speed (mph)		25			25			20			25	
Link Distance (ft)		451			157			336			396	
Travel Time (s)		12.3			4.3			11.5			10.8	
Confl. Peds. (#/hr)	10		13	3			13		3			10
Peak Hour Factor	0.55	0.55	0.55	0.69	0.69	0.69	0.82	0.82	0.82	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	25%	0%	0%	33%	1%	33%	0%	1%	2%
Adj. Flow (vph)	18	0	2	12	0	4	4	209	11	12	313	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	0	0	16	0	0	224	0	0	398	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	37.3%											
Analysis Period (min)	15											
	ICU Level of Service A											










# HCM Unsignalized Intersection Capacity Analysis 8: Forest St & Peirce St/Ryder St

2020 Existing AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	1	8	0	3	3	171	9	10	269	63
Future Volume (Veh/h)	10	0	1	8	0	3	3	171	9	10	269	63
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.69	0.69	0.69	0.82	0.82	0.82	0.86	0.86	0.86
Hourly flow rate (vph)	18	0	2	12	0	4	4	209	11	12	313	73
Pedestrians		13			3			13			10	
Lane Width (ft)		11.0			11.0			12.0			11.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			0			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	623	618	376	614	648	228	399			223		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	623	618	376	614	648	228	399			223		
tC, single (s)	7.1	6.5	6.2	7.3	6.5	6.2	4.4			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.7	4.0	3.3	2.5			2.2		
p0 queue free %	95	100	100	97	100	100	100			99		
cM capacity (veh/h)	383	397	659	359	381	808	999			1354		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	20	16	224	398								
Volume Left	18	12	4	12								
Volume Right	2	4	11	73								
cSH	400	417	999	1354								
Volume to Capacity	0.05	0.04	0.00	0.01								
Queue Length 95th (ft)	4	3	0	1								
Control Delay (s)	14.5	14.0	0.2	0.3								
Lane LOS	B	B	A	A								
Approach Delay (s)	14.5	14.0	0.2	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			37.3%			ICU Level of Service				A		
Analysis Period (min)			15									










Lanes, Volumes, Timings  
9: Ryder St & South Dr

2020 Existing AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	1	7	13	4	9
Future Volume (vph)	2	1	7	13	4	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.949		0.913			
Flt Protected	0.970					0.985
Satd. Flow (prot)	1749	0	1417	0	0	1463
Flt Permitted	0.970					0.985
Satd. Flow (perm)	1749	0	1417	0	0	1463
Link Speed (mph)	25		25			25
Link Distance (ft)	269		157			797
Travel Time (s)	7.3		4.3			21.7
Confl. Peds. (#/hr)	32	32		32	32	
Confl. Bikes (#/hr)				2		
Peak Hour Factor	0.38	0.38	0.71	0.71	0.81	0.81
Heavy Vehicles (%)	0%	0%	14%	8%	0%	22%
Parking (#/hr)			0	0	0	0
Adj. Flow (vph)	5	3	10	18	5	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	28	0	0	16
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.14	1.00	1.00	1.14
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	26.5%			ICU Level of Service A		
Analysis Period (min)	15					

















# HCM Unsignalized Intersection Capacity Analysis 9: Ryder St & South Dr

2020 Existing AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	1	7	13	4	9
Future Volume (Veh/h)	2	1	7	13	4	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.38	0.38	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	5	3	10	18	5	11
Pedestrians	32		32			32
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	3		3			3
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	104	83			60	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	104	83			60	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	842	923			1509	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	8	28	16			
Volume Left	5	0	5			
Volume Right	3	18	0			
cSH	871	1700	1509			
Volume to Capacity	0.01	0.02	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.2	0.0	2.3			
Lane LOS	A		A			
Approach Delay (s)	9.2	0.0	2.3			
Approach LOS	A					
Intersection Summary						
Average Delay		2.1				
Intersection Capacity Utilization		26.5%		ICU Level of Service		A
Analysis Period (min)		15				

Lanes, Volumes, Timings  
1: Appleton St & Appleton Pl & Massachusetts Ave

2020 Existing PM Peak Hour

















												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	423	18	114	318	2	18	1	331	1	1	3
Future Volume (vph)	3	423	18	114	318	2	18	1	331	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	12	12	12	12	12	12
Grade (%)		0%			0%			-4%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.999			0.872			0.925	
Flt Protected					0.987			0.997			0.989	
Satd. Flow (prot)	0	1724	0	0	1699	0	0	1669	0	0	1738	0
Flt Permitted					0.987			0.997			0.989	
Satd. Flow (perm)	0	1724	0	0	1699	0	0	1669	0	0	1738	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			357			73			97	
Travel Time (s)		9.0			9.7			2.0			2.6	
Confl. Peds. (#/hr)	21		1	7		27	1		7	27		21
Confl. Bikes (#/hr)			2			2						
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.90	0.90	0.90	0.62	0.62	0.62
Heavy Vehicles (%)	0%	2%	0%	1%	3%	0%	0%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	8	8	8	8	8	8	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0						
Adj. Flow (vph)	3	455	19	130	361	2	20	1	368	2	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	477	0	0	493	0	0	389	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	1.10	0.92	0.92	1.10	0.92	0.97	0.97	0.97	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 80.4%	ICU Level of Service D											
Analysis Period (min) 15												



# HCM Unsignalized Intersection Capacity Analysis










## 1: Appleton St & Appleton Pl & Massachusetts Ave

2020 Existing PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	423	18	114	318	2	18	1	331	1	1	3
Future Volume (Veh/h)	3	423	18	114	318	2	18	1	331	1	1	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			-4%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.90	0.90	0.90	0.62	0.62	0.62
Hourly flow rate (vph)	3	455	19	130	361	2	20	1	368	2	2	5
Pedestrians		21			27			7			27	
Lane Width (ft)		14.0			14.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		2			3			1			3	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	390			481			1126	1128	498	1515	1136	410
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	390			481			1126	1128	498	1515	1136	410
tC, single (s)	4.1			4.1			*5.0	*5.0	*5.0	*5.0	*5.0	*5.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			*3.0	*3.0	*3.0	3.5	4.0	3.3
p0 queue free %	100			88			94	100	48	98	99	99
cM capacity (veh/h)	1149			1080			328	328	707	96	278	705
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	477	493	389	9								
Volume Left	3	130	20	2								
Volume Right	19	2	368	5								
cSH	1149	1080	665	256								
Volume to Capacity	0.00	0.12	0.58	0.04								
Queue Length 95th (ft)	0	10	95	3								
Control Delay (s)	0.1	3.3	17.7	19.6								
Lane LOS	A	A	C	C								
Approach Delay (s)	0.1	3.3	17.7	19.6								
Approach LOS			C	C								
Intersection Summary												
Average Delay			6.4									
Intersection Capacity Utilization			80.4%	ICU Level of Service						D		
Analysis Period (min)			15									
* User Entered Value												

Lanes, Volumes, Timings  
2: Appleton St & Appleton Pl










2020 Existing PM Peak Hour

						
Lane Group	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (vph)	3	23	10	123	327	5
Future Volume (vph)	3	23	10	123	327	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12
Grade (%)	-4%		0%		-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.882		0.875		0.998	
Flt Protected	0.994		0.996		0.953	
Satd. Flow (prot)	1642	0	1626	0	1643	0
Flt Permitted	0.994		0.996		0.953	
Satd. Flow (perm)	1642	0	1626	0	1643	0
Link Speed (mph)	25		25		25	
Link Distance (ft)	178		73		363	
Travel Time (s)	4.9		2.0		9.9	
Confl. Peds. (#/hr)	20	18	9	11	11	20
Peak Hour Factor	0.65	0.65	0.84	0.84	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	2%	1%	0%
Parking (#/hr)					0	0
Adj. Flow (vph)	5	35	12	146	363	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	0	158	0	369	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	11		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.02	1.02	1.00	1.00	1.12	0.97
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	46.8%			ICU Level of Service A		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

















## 2: Appleton St & Appleton Pl

2020 Existing PM Peak Hour

						
Movement	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	3	23	10	123	327	5
Future Volume (Veh/h)	3	23	10	123	327	5
Sign Control	Stop		Free		Stop	
Grade	-4%		0%		-4%	
Peak Hour Factor	0.65	0.65	0.84	0.84	0.90	0.90
Hourly flow rate (vph)	5	35	12	146	363	6
Pedestrians	20		18		20	
Lane Width (ft)	11.0		12.0		12.0	
Walking Speed (ft/s)	3.5		3.5		3.5	
Percent Blockage	2		2		2	
Right turn flare (veh)						
Median type			None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	210	38	20		172	137
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	210	38	20		172	137
tC, single (s)	*5.0	*5.0	4.1		*5.0	*5.0
tC, 2 stage (s)						
tF (s)	*3.0	*3.0	2.2		*3.0	*3.0
p0 queue free %	99	97	99		60	99
cM capacity (veh/h)	935	1117	1581		912	1004
Direction, Lane #	WB 1	SB 1	NE 1			
Volume Total	40	158	369			
Volume Left	0	12	363			
Volume Right	35	146	0			
cSH	1090	1581	913			
Volume to Capacity	0.04	0.01	0.40			
Queue Length 95th (ft)	3	1	49			
Control Delay (s)	8.4	0.6	11.6			
Lane LOS	A	A	B			
Approach Delay (s)	8.4	0.6	11.6			
Approach LOS	A		B			
Intersection Summary						
Average Delay			8.3			
Intersection Capacity Utilization			46.8%	ICU Level of Service		A
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
3: Burton St/Forest St & Massachusetts Ave

















2020 Existing PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	562	2	3	375	92	1	3	8	38	4	65
Future Volume (vph)	201	562	2	3	375	92	1	3	8	38	4	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	12	12	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.973			0.912			0.918	
Flt Protected		0.987						0.995			0.983	
Satd. Flow (prot)	0	1676	0	0	1799	0	0	1552	0	0	1715	0
Flt Permitted		0.987						0.995			0.983	
Satd. Flow (perm)	0	1676	0	0	1799	0	0	1552	0	0	1715	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		357			87			283			336	
Travel Time (s)		9.7			2.4			7.7			9.2	
Confl. Peds. (#/hr)	19		21			2	19		14	16		21
Confl. Bikes (#/hr)			2			3						1
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.60	0.60	0.60	0.81	0.81	0.81
Heavy Vehicles (%)	3%	9%	0%	0%	3%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0				0	0	0			
Adj. Flow (vph)	216	604	2	3	426	105	2	5	13	47	5	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	822	0	0	534	0	0	20	0	0	132	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	1.05	0.92	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	90.6%											
Analysis Period (min)	15											
	ICU Level of Service E											

# HCM Unsignalized Intersection Capacity Analysis










## 3: Burton St/Forest St & Massachusetts Ave

2020 Existing PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	562	2	3	375	92	1	3	8	38	4	65
Future Volume (Veh/h)	201	562	2	3	375	92	1	3	8	38	4	65
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.60	0.60	0.60	0.81	0.81	0.81
Hourly flow rate (vph)	216	604	2	3	426	105	2	5	13	47	5	80
Pedestrians	21			16			21			19		
Lane Width (ft)	14.0			12.0			12.0			12.0		
Walking Speed (ft/s)	3.5			3.5			3.5			3.5		
Percent Blockage	2			2			2			2		
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	550			627			1646	1614	642	1572	1562	518
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	550			627			1646	1614	642	1572	1562	518
tC, single (s)	4.1			4.1			*5.0	*5.0	*5.0	*5.0	*5.0	*5.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			*3.0	*3.0	*3.0	*3.0	*3.0	*3.0
p0 queue free %	78			100			99	97	98	74	97	88
cM capacity (veh/h)	996			945			150	174	613	182	184	690
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	822	534	20	132								
Volume Left	216	3	2	47								
Volume Right	2	105	13	80								
cSH	996	945	316	328								
Volume to Capacity	0.22	0.00	0.06	0.40								
Queue Length 95th (ft)	21	0	5	47								
Control Delay (s)	4.9	0.1	17.1	23.1								
Lane LOS	A	A	C	C								
Approach Delay (s)	4.9	0.1	17.1	23.1								
Approach LOS			C	C								
Intersection Summary												
Average Delay			5.0									
Intersection Capacity Utilization			90.6%	ICU Level of Service				E				
Analysis Period (min)			15									
* User Entered Value												

Lanes, Volumes, Timings  
4: Massachusetts Ave & West Dr










2020 Existing PM Peak Hour

						
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	6	602	453	2	6	17
Future Volume (vph)	6	602	453	2	6	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.899	
Flt Protected					0.988	
Satd. Flow (prot)	0	1677	1769	0	1575	0
Flt Permitted					0.988	
Satd. Flow (perm)	0	1677	1769	0	1575	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		87	240		169	
Travel Time (s)		2.4	6.5		4.6	
Confl. Peds. (#/hr)					19	19
Confl. Bikes (#/hr)				3		
Peak Hour Factor	0.93	0.93	0.88	0.88	0.64	0.64
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Parking (#/hr)	0	0	0	0		
Adj. Flow (vph)	6	647	515	2	9	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	653	517	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.14	1.05	0.92	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	51.2%			ICU Level of Service A		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

## 4: Massachusetts Ave & West Dr

2020 Existing PM Peak Hour

						
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	6	602	453	2	6	17
Future Volume (Veh/h)	6	602	453	2	6	17
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.93	0.93	0.88	0.88	0.64	0.64
Hourly flow rate (vph)	6	647	515	2	9	27
Pedestrians		19	19			
Lane Width (ft)		12.0	14.0			
Walking Speed (ft/s)		3.5	3.5			
Percent Blockage		2	2			
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	517				1194	535
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	517				1194	535
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
p0 queue free %	99				97	96
cM capacity (veh/h)	1059				351	695
Direction, Lane #	EB 1	WB 1	SW 1			
Volume Total	653	517	36			
Volume Left	6	0	9			
Volume Right	0	2	27			
cSH	1059	1700	558			
Volume to Capacity	0.01	0.30	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.2	0.0	11.9			
Lane LOS	A		B			
Approach Delay (s)	0.2	0.0	11.9			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.4			
Intersection Capacity Utilization		51.2%		ICU Level of Service		A
Analysis Period (min)		15				
* User Entered Value						



Lanes, Volumes, Timings  
5: Pine Ct & Massachusetts Ave

2020 Existing PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶↷	
Traffic Volume (vph)	606	3	2	456	1	1
Future Volume (vph)	606	3	2	456	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	12	12
Grade (%)	0%			0%	-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.932	
Flt Protected					0.976	
Satd. Flow (prot)	1608	0	0	1641	1587	0
Flt Permitted					0.976	
Satd. Flow (perm)	1608	0	0	1641	1587	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	240			134	415	
Travel Time (s)	6.5			3.7	11.3	
Confl. Peds. (#/hr)		8	8		8	8
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.92	0.92	0.90	0.90	0.50	0.50
Heavy Vehicles (%)	2%	0%	3%	0%	0%	0%
Parking (#/hr)	0	0	0	0		
Adj. Flow (vph)	659	3	2	507	2	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	662	0	0	509	4	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.20	1.05	1.05	1.20	1.12	1.12
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	CBD					
Control Type:	Unsignalized					
Intersection Capacity Utilization	48.0%			ICU Level of Service A		
Analysis Period (min)	15					










# HCM Unsignalized Intersection Capacity Analysis 5: Pine Ct & Massachusetts Ave

2020 Existing PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↶	↶	
Traffic Volume (veh/h)	606	3	2	456	1	1
Future Volume (Veh/h)	606	3	2	456	1	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	-4%	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.50	0.50
Hourly flow rate (vph)	659	3	2	507	2	2
Pedestrians	8			8	8	
Lane Width (ft)	14.0			14.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			670		1188	676
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			670		1188	676
tC, single (s)			4.1		*5.0	*5.0
tC, 2 stage (s)						
tF (s)			2.2		*3.0	*3.0
p0 queue free %			100		99	100
cM capacity (veh/h)			909		356	603
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	662	509	4			
Volume Left	0	2	2			
Volume Right	3	0	2			
cSH	1700	909	448			
Volume to Capacity	0.39	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	13.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	13.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			48.0%	ICU Level of Service		A
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
6: Massachusetts Ave & Quinn Rd

2020 Existing PM Peak Hour










						
Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	4	600	439	5	13	19
Future Volume (vph)	4	600	439	5	13	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.920	
Flt Protected					0.980	
Satd. Flow (prot)	0	1863	1726	0	1775	0
Flt Permitted					0.980	
Satd. Flow (perm)	0	1863	1726	0	1775	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		134	384		203	
Travel Time (s)		3.7	10.5		5.5	
Confl. Peds. (#/hr)	20			21	21	20
Confl. Bikes (#/hr)				7		
Peak Hour Factor	0.98	0.98	0.90	0.90	0.50	0.50
Heavy Vehicles (%)	0%	2%	2%	0%	0%	5%
Parking (#/hr)			6	0		
Adj. Flow (vph)	4	612	488	6	26	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	616	494	0	64	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		14	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.10	0.92	0.92	0.92
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	49.6%			ICU Level of Service A		
Analysis Period (min)	15					





# HCM Unsignalized Intersection Capacity Analysis 7: West Dr/Mill Brook Br & Quinn Access Rd

2020 Existing PM Peak Hour

















						
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	11	0	3	5	0	20
Future Volume (Veh/h)	11	0	3	5	0	20
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.58	0.58	0.58	0.58	0.50	0.50
Hourly flow rate (vph)	19	0	5	9	0	40
Pedestrians	2		2		2	
Lane Width (ft)	12.0		12.0		9.0	
Walking Speed (ft/s)	3.5		3.5		3.5	
Percent Blockage	0		0		0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	54	14	16			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	54	14	16			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	956	1069	1612			
Direction, Lane #	NW 1	NE 1	SW 1			
Volume Total	19	14	40			
Volume Left	19	0	0			
Volume Right	0	9	0			
cSH	956	1700	1612			
Volume to Capacity	0.02	0.01	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	8.8	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.8	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay	2.3					
Intersection Capacity Utilization	14.6%			ICU Level of Service		A
Analysis Period (min)	15					





# HCM Unsignalized Intersection Capacity Analysis 8: Forest St & Peirce St/Ryder St

2020 Existing PM Peak Hour
















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1	2	9	1	5	4	273	4	5	90	5
Future Volume (Veh/h)	7	1	2	9	1	5	4	273	4	5	90	5
Sign Control	Stop				Stop				Free		Free	
Grade	0%				0%				0%		0%	
Peak Hour Factor	0.83	0.83	0.83	0.67	0.25	0.75	0.93	0.93	0.93	0.84	0.84	0.84
Hourly flow rate (vph)	8	1	2	13	4	7	4	294	4	6	107	6
Pedestrians	6				2				6		5	
Lane Width (ft)	11.0				11.0				12.0		11.0	
Walking Speed (ft/s)	3.5				3.5				3.5		3.5	
Percent Blockage	1				0				1		0	
Right turn flare (veh)												
Median type	None								None			
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	446	436	122	436	437	303	119				300	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	446	436	122	436	437	303	119				300	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.3				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.4				2.2	
p0 queue free %	98	100	100	98	99	99	100				100	
cM capacity (veh/h)	507	509	924	522	509	737	1331				1270	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	11	24	302	119								
Volume Left	8	13	4	6								
Volume Right	2	7	4	6								
cSH	553	568	1331	1270								
Volume to Capacity	0.02	0.04	0.00	0.00								
Queue Length 95th (ft)	2	3	0	0								
Control Delay (s)	11.6	11.6	0.1	0.4								
Lane LOS	B	B	A	A								
Approach Delay (s)	11.6	11.6	0.1	0.4								
Approach LOS	B	B										
Intersection Summary												
Average Delay				1.1								
Intersection Capacity Utilization				27.7%	ICU Level of Service				A			
Analysis Period (min)				15								





Lanes, Volumes, Timings  
1: Appleton St & Appleton Pl & Massachusetts Ave










2025 No-Build AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	376	51	313	396	0	19	0	180	0	0	0
Future Volume (vph)	0	376	51	313	396	0	19	0	180	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	12	12	12	12	12	12
Grade (%)		0%			0%			-4%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984						0.878				
Flt Protected					0.978			0.995				
Satd. Flow (prot)	0	1581	0	0	1648	0	0	1678	0	0	1863	0
Flt Permitted					0.978			0.995				
Satd. Flow (perm)	0	1581	0	0	1648	0	0	1678	0	0	1863	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			357			73			97	
Travel Time (s)		9.0			9.7			2.0			2.6	
Confl. Peds. (#/hr)	109		11	118		215	11		118	215		109
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.75	0.75	0.75	0.84	0.84	0.84	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	11%	2%	2%	7%	0%	0%	0%	1%	2%	2%	2%
Bus Blockages (#/hr)	8	8	8	8	8	8	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0						
Adj. Flow (vph)	0	501	68	373	471	0	22	0	212	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	569	0	0	844	0	0	234	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	1.10	0.92	0.92	1.10	0.92	0.97	0.97	0.97	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	89.3%						ICU Level of Service E					
Analysis Period (min)	15											



Lanes, Volumes, Timings  
2: Appleton St & Appleton Pl

2025 No-Build AM Peak Hour

						
Lane Group	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (vph)	39	32	29	335	167	9
Future Volume (vph)	39	32	29	335	167	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12
Grade (%)	-4%		0%		-4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.939		0.876		0.993	
Flt Protected	0.973		0.996		0.955	
Satd. Flow (prot)	1657	0	1628	0	1639	0
Flt Permitted	0.973		0.996		0.955	
Satd. Flow (perm)	1657	0	1628	0	1639	0
Link Speed (mph)	25		25		25	
Link Distance (ft)	178		73		363	
Travel Time (s)	4.9		2.0		9.9	
Confl. Peds. (#/hr)	109	91	91	18	18	109
Confl. Bikes (#/hr)						4
Peak Hour Factor	0.38	0.38	0.84	0.84	0.85	0.85
Heavy Vehicles (%)	6%	0%	0%	2%	1%	0%
Parking (#/hr)					0	0
Adj. Flow (vph)	103	84	35	399	196	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	187	0	434	0	207	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	11		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.02	1.02	1.00	1.00	1.12	0.97
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	60.2%			ICU Level of Service B		
Analysis Period (min)	15					























# HCM Unsignalized Intersection Capacity Analysis

## 3: Burton St/Forest St & Massachusetts Ave

2025 No-Build AM Peak Hour

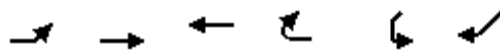
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	456	1	10	491	108	0	10	21	72	24	214
Future Volume (Veh/h)	100	456	1	10	491	108	0	10	21	72	24	214
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.44	0.44	0.44	0.89	0.89	0.89
Hourly flow rate (vph)	115	524	1	11	564	124	0	23	48	81	27	240
Pedestrians		57			9			56			57	
Lane Width (ft)		14.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		6			1			5			5	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	745			581			1769	1578	590	1528	1516	740
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	745			581			1769	1578	590	1528	1516	740
tC, single (s)	4.1			4.1			7.1	*5.0	*5.0	*5.0	*5.0	*5.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	*3.0	*3.0	*3.0	*3.0	*3.0
p0 queue free %	86			99			100	87	92	50	86	53
cM capacity (veh/h)	812			950			23	183	629	163	195	510
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	640	699	71	348								
Volume Left	115	11	0	81								
Volume Right	1	124	48	240								
cSH	812	950	352	314								
Volume to Capacity	0.14	0.01	0.20	1.11								
Queue Length 95th (ft)	12	1	19	343								
Control Delay (s)	3.5	0.3	17.8	119.7								
Lane LOS	A	A	C	F								
Approach Delay (s)	3.5	0.3	17.8	119.7								
Approach LOS			C	F								
Intersection Summary												
Average Delay			25.8									
Intersection Capacity Utilization			100.8%		ICU Level of Service				G			
Analysis Period (min)			15									
* User Entered Value												



# HCM Unsignalized Intersection Capacity Analysis

## 4: Massachusetts Ave & West Dr

2025 No-Build AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	22	527	608	6	1	1
Future Volume (Veh/h)	22	527	608	6	1	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.25	0.25
Hourly flow rate (vph)	25	606	699	7	4	4
Pedestrians		8	8		8	
Lane Width (ft)		12.0	14.0		10.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	714				1374	718
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	714				1374	718
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*5.0	*5.0
p0 queue free %	97				98	99
cM capacity (veh/h)	890				229	414
Direction, Lane #	EB 1	WB 1	SW 1			
Volume Total	631	706	8			
Volume Left	25	0	4			
Volume Right	0	7	4			
cSH	890	1700	295			
Volume to Capacity	0.03	0.42	0.03			
Queue Length 95th (ft)	2	0	2			
Control Delay (s)	0.7	0.0	17.6			
Lane LOS	A		C			
Approach Delay (s)	0.7	0.0	17.6			
Approach LOS			C			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			57.9%	ICU Level of Service		B
Analysis Period (min)			15			










\* User Entered Value





Lanes, Volumes, Timings  
6: Massachusetts Ave & Quinn Rd

2025 No-Build AM Peak Hour










						
Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	28	513	603	10	3	7
Future Volume (vph)	28	513	603	10	3	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.907	
Flt Protected		0.997			0.985	
Satd. Flow (prot)	0	1757	1677	0	1652	0
Flt Permitted		0.997			0.985	
Satd. Flow (perm)	0	1757	1677	0	1652	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		134	384		203	
Travel Time (s)		3.7	10.5		5.5	
Confl. Peds. (#/hr)	10			10	10	10
Confl. Bikes (#/hr)				3		
Peak Hour Factor	0.85	0.85	0.88	0.88	0.62	0.62
Heavy Vehicles (%)	4%	8%	5%	0%	0%	14%
Parking (#/hr)			6	0		
Adj. Flow (vph)	33	604	685	11	5	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	637	696	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		14	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.10	0.92	0.92	0.92
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 62.7%				ICU Level of Service B		
Analysis Period (min) 15						





Lanes, Volumes, Timings  
7: West Dr/Mill Brook Br & Quinn Access Rd

2025 No-Build AM Peak Hour

















						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	2	1	18	8	5	2
Future Volume (vph)	2	1	18	8	5	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	9	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966		0.959			
Flt Protected	0.964					0.966
Satd. Flow (prot)	1592	0	1822	0	0	1449
Flt Permitted	0.964					0.966
Satd. Flow (perm)	1592	0	1822	0	0	1449
Link Speed (mph)	25		25			25
Link Distance (ft)	315		169			187
Travel Time (s)	8.6		4.6			5.1
Peak Hour Factor	0.75	0.75	0.61	0.61	0.35	0.35
Heavy Vehicles (%)	0%	0%	0%	0%	20%	0%
Parking (#/hr)	0	0				
Adj. Flow (vph)	3	1	30	13	14	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	43	0	0	20
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.14	1.00	1.00	1.00	1.14	1.14
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	14.5%			ICU Level of Service A		
Analysis Period (min)	15					





# HCM Unsignalized Intersection Capacity Analysis 8: Forest St & Peirce St/Ryder St










2025 No-Build AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	1	9	0	3	3	189	10	11	297	69
Future Volume (Veh/h)	11	0	1	9	0	3	3	189	10	11	297	69
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.69	0.69	0.69	0.82	0.82	0.82	0.86	0.86	0.86
Hourly flow rate (vph)	20	0	2	13	0	4	4	230	12	13	345	80
Pedestrians		13			3			13			10	
Lane Width (ft)		11.0			11.0			12.0			11.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			0			1			1	
Right turn flare (veh)												
Median type	None								None			
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	682	677	411	673	711	249	438			245		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	682	677	411	673	711	249	438			245		
tC, single (s)	7.1	6.5	6.2	7.3	6.5	6.2	4.4			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.7	4.0	3.3	2.5			2.2		
p0 queue free %	94	100	100	96	100	99	100			99		
cM capacity (veh/h)	350	367	630	326	351	786	964			1329		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	22	17	246	438								
Volume Left	20	13	4	13								
Volume Right	2	4	12	80								
cSH	365	378	964	1329								
Volume to Capacity	0.06	0.04	0.00	0.01								
Queue Length 95th (ft)	5	4	0	1								
Control Delay (s)	15.5	15.0	0.2	0.3								
Lane LOS	C	B	A	A								
Approach Delay (s)	15.5	15.0	0.2	0.3								
Approach LOS	C	B										
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization			39.9%		ICU Level of Service				A			
Analysis Period (min)			15									



















# HCM Unsignalized Intersection Capacity Analysis 9: Ryder St & South Dr

2025 No-Build AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	1	8	13	4	10
Future Volume (Veh/h)	2	1	8	13	4	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.38	0.38	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	5	3	11	18	5	12
Pedestrians	32		32			32
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	3		3			3
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	106	84			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	106	84			61	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	840	922			1508	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	8	29	17			
Volume Left	5	0	5			
Volume Right	3	18	0			
cSH	869	1700	1508			
Volume to Capacity	0.01	0.02	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.2	0.0	2.2			
Lane LOS	A		A			
Approach Delay (s)	9.2	0.0	2.2			
Approach LOS	A					
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization			26.5%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings  
1: Appleton St & Appleton Pl & Massachusetts Ave

















2025 No-Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	467	20	126	351	2	20	1	364	1	1	3
Future Volume (vph)	3	467	20	126	351	2	20	1	364	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	12	12	12	12	12	12
Grade (%)		0%			0%			-4%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994						0.872			0.925	
Flt Protected					0.987			0.997			0.989	
Satd. Flow (prot)	0	1722	0	0	1701	0	0	1669	0	0	1738	0
Flt Permitted					0.987			0.997			0.989	
Satd. Flow (perm)	0	1722	0	0	1701	0	0	1669	0	0	1738	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			357			73			97	
Travel Time (s)		9.0			9.7			2.0			2.6	
Confl. Peds. (#/hr)	21		1	7		27	1		7	27		21
Confl. Bikes (#/hr)			2			2						
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.90	0.90	0.90	0.62	0.62	0.62
Heavy Vehicles (%)	0%	2%	0%	1%	3%	0%	0%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	8	8	8	8	8	8	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0						
Adj. Flow (vph)	3	502	22	143	399	2	22	1	404	2	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	527	0	0	544	0	0	427	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	1.10	0.92	0.92	1.10	0.92	0.97	0.97	0.97	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	87.5%						ICU Level of Service E					
Analysis Period (min)	15											

# HCM Unsignalized Intersection Capacity Analysis

## 1: Appleton St & Appleton Pl & Massachusetts Ave

2025 No-Build PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	467	20	126	351	2	20	1	364	1	1	3
Future Volume (Veh/h)	3	467	20	126	351	2	20	1	364	1	1	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			-4%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.90	0.90	0.90	0.62	0.62	0.62
Hourly flow rate (vph)	3	502	22	143	399	2	22	1	404	2	2	5
Pedestrians		21			27			7			27	
Lane Width (ft)		14.0			14.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		2			3			1			3	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	428			531			1239	1240	547	1664	1250	448
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	428			531			1239	1240	547	1664	1250	448
tC, single (s)	4.1			4.1			*5.0	*5.0	*5.0	*5.0	*5.0	*5.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			*3.0	*3.0	*3.0	*3.0	*3.0	*3.0
p0 queue free %	100			86			92	100	40	97	99	99
cM capacity (veh/h)	1113			1035			287	286	673	72	283	734
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	527	544	427	9								
Volume Left	3	143	22	2								
Volume Right	22	2	404	5								
cSH	1113	1035	628	217								
Volume to Capacity	0.00	0.14	0.68	0.04								
Queue Length 95th (ft)	0	12	132	3								
Control Delay (s)	0.1	3.6	22.0	22.3								
Lane LOS	A	A	C	C								
Approach Delay (s)	0.1	3.6	22.0	22.3								
Approach LOS			C	C								
Intersection Summary												
Average Delay			7.7									
Intersection Capacity Utilization			87.5%	ICU Level of Service					E			
Analysis Period (min)			15									
* User Entered Value												























Lanes, Volumes, Timings  
3: Burton St/Forest St & Massachusetts Ave

2025 No-Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	619	2	3	412	100	1	3	9	42	4	72
Future Volume (vph)	221	619	2	3	412	100	1	3	9	42	4	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	12	12	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.974			0.908			0.918	
Flt Protected		0.987						0.995			0.983	
Satd. Flow (prot)	0	1676	0	0	1800	0	0	1545	0	0	1715	0
Flt Permitted		0.987						0.995			0.983	
Satd. Flow (perm)	0	1676	0	0	1800	0	0	1545	0	0	1715	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		357			87			283			336	
Travel Time (s)		9.7			2.4			7.7			9.2	
Confl. Peds. (#/hr)	19		21			2	19		14	16		21
Confl. Bikes (#/hr)			2			3						1
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.60	0.60	0.60	0.81	0.81	0.81
Heavy Vehicles (%)	3%	9%	0%	0%	3%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0				0	0	0			
Adj. Flow (vph)	238	666	2	3	468	114	2	5	15	52	5	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	906	0	0	585	0	0	22	0	0	146	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	1.05	0.92	1.00	1.00	1.00	1.00	1.14	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 97.7%	ICU Level of Service F											
Analysis Period (min) 15												



Lanes, Volumes, Timings  
4: Massachusetts Ave & West Dr

2025 No-Build PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↰	↱		↰	↱
Traffic Volume (vph)	6	664	498	2	6	17
Future Volume (vph)	6	664	498	2	6	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.899	
Flt Protected					0.988	
Satd. Flow (prot)	0	1677	1771	0	1575	0
Flt Permitted					0.988	
Satd. Flow (perm)	0	1677	1771	0	1575	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		87	240		169	
Travel Time (s)		2.4	6.5		4.6	
Confl. Peds. (#/hr)					19	19
Confl. Bikes (#/hr)				3		
Peak Hour Factor	0.93	0.93	0.88	0.88	0.64	0.64
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Parking (#/hr)	0	0	0	0		
Adj. Flow (vph)	6	714	566	2	9	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	720	568	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.14	1.05	0.92	1.09	1.09
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.4% ICU Level of Service A

Analysis Period (min) 15














# HCM Unsignalized Intersection Capacity Analysis

## 5: Pine Ct & Massachusetts Ave

2025 No-Build PM Peak Hour










						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	668	3	2	503	1	1
Future Volume (Veh/h)	668	3	2	503	1	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	-4%	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.50	0.50
Hourly flow rate (vph)	726	3	2	559	2	2
Pedestrians	8			8	8	
Lane Width (ft)	14.0			14.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			737	1306		744
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			737	1306		744
tC, single (s)			4.1	*5.0		*5.0
tC, 2 stage (s)						
tF (s)			2.2	*3.0		*3.0
p0 queue free %			100	99		100
cM capacity (veh/h)			858	315		564
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	729	561	4			
Volume Left	0	2	2			
Volume Right	3	0	2			
cSH	1700	858	404			
Volume to Capacity	0.43	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	14.0			
Lane LOS			A B			
Approach Delay (s)	0.0	0.1	14.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			51.6%	ICU Level of Service		A
Analysis Period (min)			15			
* User Entered Value						





# HCM Unsignalized Intersection Capacity Analysis 6: Massachusetts Ave & Quinn Rd

2025 No-Build PM Peak Hour

















						
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	4	662	484	5	13	19
Future Volume (Veh/h)	4	662	484	5	13	19
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.90	0.90	0.50	0.50
Hourly flow rate (vph)	4	676	538	6	26	38
Pedestrians		20	21		21	
Lane Width (ft)		12.0	14.0		14.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		2	2		2	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	565				1267	582
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	565				1267	582
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
p0 queue free %	100				92	94
cM capacity (veh/h)	993				318	647
Direction, Lane #	SE 1	NW 1	SW 1			
Volume Total	680	544	64			
Volume Left	4	0	26			
Volume Right	0	6	38			
cSH	993	1700	455			
Volume to Capacity	0.00	0.32	0.14			
Queue Length 95th (ft)	0	0	12			
Control Delay (s)	0.1	0.0	14.2			
Lane LOS	A		B			
Approach Delay (s)	0.1	0.0	14.2			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.8			
Intersection Capacity Utilization			52.9%	ICU Level of Service		A
Analysis Period (min)			15			
* User Entered Value						





Lanes, Volumes, Timings  
8: Forest St & Peirce St/Ryder St










2025 No-Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	2	10	1	6	4	301	4	6	99	6
Future Volume (vph)	8	1	2	10	1	6	4	301	4	6	99	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.979			0.960			0.998			0.993	
Flt Protected		0.963			0.973			0.999			0.997	
Satd. Flow (prot)	0	1732	0	0	1716	0	0	1870	0	0	1818	0
Flt Permitted		0.963			0.973			0.999			0.997	
Satd. Flow (perm)	0	1732	0	0	1716	0	0	1870	0	0	1818	0
Link Speed (mph)		25			25			20			25	
Link Distance (ft)		451			157			336			396	
Travel Time (s)		12.3			4.3			11.5			10.8	
Confl. Peds. (#/hr)	5		6	2		1	6		2	1		5
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.83	0.83	0.83	0.67	0.25	0.75	0.93	0.93	0.93	0.84	0.84	0.84
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	25%	1%	0%	0%	0%	0%
Adj. Flow (vph)	10	1	2	15	4	8	4	324	4	7	118	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	0	0	27	0	0	332	0	0	132	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	29.1%											
Analysis Period (min)	15											
ICU Level of Service A												



Lanes, Volumes, Timings  
9: Ryder St & South Dr

2025 No-Build PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	1	6	4	0	10
Future Volume (vph)	10	1	6	4	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.985		0.944			
Flt Protected	0.957					
Satd. Flow (prot)	1791	0	1464	0	0	1402
Flt Permitted	0.957					
Satd. Flow (perm)	1791	0	1464	0	0	1402
Link Speed (mph)	25		25			25
Link Distance (ft)	269		157			797
Travel Time (s)	7.3		4.3			21.7
Confl. Peds. (#/hr)	6	5		6	5	
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.62	0.62	0.59	0.59	0.42	0.42
Heavy Vehicles (%)	0%	0%	0%	25%	0%	22%
Parking (#/hr)			0	0	0	0
Adj. Flow (vph)	16	2	10	7	0	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	0	17	0	0	24
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.14	1.00	1.00	1.14
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	16.7%			ICU Level of Service A		
Analysis Period (min)	15					























# HCM Unsignalized Intersection Capacity Analysis

## 1: Appleton St & Appleton Pl & Massachusetts Ave










2025 Build AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	371	51	316	402	0	19	0	175	1	0	0
Future Volume (Veh/h)	0	371	51	316	402	0	19	0	175	1	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			-4%			0%	
Peak Hour Factor	0.75	0.75	0.75	0.84	0.84	0.84	0.85	0.85	0.85	0.92	0.92	0.92
Hourly flow rate (vph)	0	495	68	376	479	0	22	0	206	1	0	0
Pedestrians		109			215			118			215	
Lane Width (ft)		14.0			14.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		12			24			11			20	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	694			681			1987	2093	862	2396	2127	803
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	694			681			1987	2093	862	2396	2127	803
tC, single (s)	4.1			4.1			*4.0	6.5	*3.0	*3.0	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			*3.0	4.0	*3.0	3.5	4.0	3.3
p0 queue free %	100			54			79	100	63	99	100	100
cM capacity (veh/h)	724			809			106	20	554	69	19	268
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	563	855	228	1								
Volume Left	0	376	22	1								
Volume Right	68	0	206	0								
cSH	724	809	393	69								
Volume to Capacity	0.00	0.46	0.58	0.01								
Queue Length 95th (ft)	0	62	88	1								
Control Delay (s)	0.0	10.6	26.0	58.1								
Lane LOS		B	D	F								
Approach Delay (s)	0.0	10.6	26.0	58.1								
Approach LOS			D	F								
Intersection Summary												
Average Delay				9.2								
Intersection Capacity Utilization				88.6%	ICU Level of Service				E			
Analysis Period (min)				15								
* User Entered Value												



# HCM Unsignalized Intersection Capacity Analysis 2: Appleton St & Appleton Pl

2025 Build AM Peak Hour










						
Movement	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	39	32	29	338	162	9
Future Volume (Veh/h)	39	32	29	338	162	9
Sign Control	Stop		Free		Stop	
Grade	-4%		0%		-4%	
Peak Hour Factor	0.38	0.38	0.84	0.84	0.85	0.85
Hourly flow rate (vph)	103	84	35	402	191	11
Pedestrians	109		91		109	
Lane Width (ft)	11.0		12.0		12.0	
Walking Speed (ft/s)	3.5		3.5		3.5	
Percent Blockage	10		9		10	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	690	200	109		606	489
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	690	200	109		606	489
tC, single (s)	*5.0	*5.0	4.1		*5.0	*5.0
tC, 2 stage (s)						
tF (s)	*3.0	*3.0	2.2		*3.0	*3.0
p0 queue free %	78	90	97		44	98
cM capacity (veh/h)	478	816	1352		340	585
Direction, Lane #	WB 1	SB 1	NE 1			
Volume Total	187	437	202			
Volume Left	0	35	191			
Volume Right	84	402	0			
cSH	587	1352	348			
Volume to Capacity	0.32	0.03	0.58			
Queue Length 95th (ft)	34	2	87			
Control Delay (s)	14.0	0.9	28.7			
Lane LOS	B	A	D			
Approach Delay (s)	14.0	0.9	28.7			
Approach LOS	B		D			
Intersection Summary						
Average Delay			10.6			
Intersection Capacity Utilization			60.4%	ICU Level of Service	B	
Analysis Period (min)			15			
* User Entered Value						





Lanes, Volumes, Timings  
4: Massachusetts Ave & West Dr

2025 Build AM Peak Hour

						
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	18	527	608	6	1	0
Future Volume (vph)	18	527	608	6	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	10	10
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999			
Flt Protected		0.998			0.950	
Satd. Flow (prot)	0	1584	1720	0	1685	0
Flt Permitted		0.998			0.950	
Satd. Flow (perm)	0	1584	1720	0	1685	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		87	240		169	
Travel Time (s)		2.4	6.5		4.6	
Confl. Peds. (#/hr)	8			8	8	8
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.87	0.87	0.25	0.25
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	8%	6%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0		
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	21	606	699	7	4	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	627	706	0	4	0
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	54.6%			ICU Level of Service A		
Analysis Period (min)	15					





Lanes, Volumes, Timings  
5: Pine Ct & Massachusetts Ave

2025 Build AM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↲	
Traffic Volume (vph)	533	2	0	610	1	8
Future Volume (vph)	533	2	0	610	1	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	12	12
Grade (%)	0%			0%	-4%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.880	
Flt Protected					0.994	
Satd. Flow (prot)	1506	0	0	1563	1526	0
Flt Permitted					0.994	
Satd. Flow (perm)	1506	0	0	1563	1526	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	240			134	415	
Travel Time (s)	6.5			3.7	11.3	
Confl. Peds. (#/hr)		10	10		10	10
Confl. Bikes (#/hr)		3				
Peak Hour Factor	0.85	0.85	0.88	0.88	0.50	0.50
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	0%	0%	5%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0		
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	627	2	0	693	2	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	629	0	0	693	18	0
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	CBD					
Control Type:	Unsignalized					
Intersection Capacity Utilization	48.5%			ICU Level of Service A		
Analysis Period (min)	15					














# HCM Unsignalized Intersection Capacity Analysis

## 6: Massachusetts Ave & Quinn Rd

2025 Build AM Peak Hour










						
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	28	512	603	9	20	7
Future Volume (Veh/h)	28	512	603	9	20	7
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.88	0.88	0.62	0.62
Hourly flow rate (vph)	33	602	685	10	32	11
Pedestrians		10	10		10	
Lane Width (ft)		12.0	14.0		14.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	705				1378	710
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	705				1378	710
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
p0 queue free %	96				89	98
cM capacity (veh/h)	874				280	581
Direction, Lane #	SE 1	NW 1	SW 1			
Volume Total	635	695	43			
Volume Left	33	0	32			
Volume Right	0	10	11			
cSH	874	1700	323			
Volume to Capacity	0.04	0.41	0.13			
Queue Length 95th (ft)	3	0	11			
Control Delay (s)	1.0	0.0	17.9			
Lane LOS	A		C			
Approach Delay (s)	1.0	0.0	17.9			
Approach LOS			C			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			62.6%	ICU Level of Service		B
Analysis Period (min)			15			
* User Entered Value						



# HCM Unsignalized Intersection Capacity Analysis

















## 7: West Dr/Mill Brook Br & Quinn Access Rd

2025 Build AM Peak Hour

						
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	2	1	14	8	20	0
Future Volume (Veh/h)	2	1	14	8	20	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.61	0.61	0.35	0.35
Hourly flow rate (vph)	3	1	23	13	57	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	144	30			36	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	144	30			36	
tC, single (s)	6.4	6.2			4.3	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.4	
p0 queue free %	100	100			96	
cM capacity (veh/h)	821	1051			1466	
Direction, Lane #	NW 1	NE 1	SW 1			
Volume Total	4	36	57			
Volume Left	3	0	57			
Volume Right	1	13	0			
cSH	868	1700	1466			
Volume to Capacity	0.00	0.02	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	9.2	0.0	7.6			
Lane LOS	A		A			
Approach Delay (s)	9.2	0.0	7.6			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			4.8			
Intersection Capacity Utilization			17.8%	ICU Level of Service		A
Analysis Period (min)			15			

















Lanes, Volumes, Timings  
8: Forest St & Peirce St/Ryder St

2025 Build AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	0	1	18	0	3	3	188	5	10	297	69
Future Volume (vph)	11	0	1	18	0	3	3	188	5	10	297	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.988			0.982			0.997			0.975	
Flt Protected		0.957			0.958			0.999			0.999	
Satd. Flow (prot)	0	1737	0	0	1420	0	0	1849	0	0	1769	0
Flt Permitted		0.957			0.958			0.999			0.999	
Satd. Flow (perm)	0	1737	0	0	1420	0	0	1849	0	0	1769	0
Link Speed (mph)		25			25			20			25	
Link Distance (ft)		451			157			336			396	
Travel Time (s)		12.3			4.3			11.5			10.8	
Confl. Peds. (#/hr)	10		13	3			13		3			10
Confl. Bikes (#/hr)												
Peak Hour Factor	0.55	0.55	0.55	0.69	0.69	0.69	0.82	0.82	0.82	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	25%	0%	0%	33%	1%	33%	0%	1%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	20	0	2	26	0	4	4	229	6	12	345	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	30	0	0	239	0	0	437	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	39.2%						ICU Level of Service A					
Analysis Period (min)	15											

# HCM Unsignalized Intersection Capacity Analysis 8: Forest St & Peirce St/Ryder St










2025 Build AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	1	18	0	3	3	188	5	10	297	69
Future Volume (Veh/h)	11	0	1	18	0	3	3	188	5	10	297	69
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.55	0.55	0.55	0.69	0.69	0.69	0.82	0.82	0.82	0.86	0.86	0.86
Hourly flow rate (vph)	20	0	2	26	0	4	4	229	6	12	345	80
Pedestrians	13			3			13			10		
Lane Width (ft)	11.0			11.0			12.0			11.0		
Walking Speed (ft/s)	3.5			3.5			3.5			3.5		
Percent Blockage	1			0			1			1		
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	676	668	411	667	705	245	438				238	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	676	668	411	667	705	245	438				238	
tC, single (s)	7.1	6.5	6.2	7.3	6.5	6.2	4.4				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.7	4.0	3.3	2.5				2.2	
p0 queue free %	94	100	100	92	100	99	100				99	
cM capacity (veh/h)	353	371	630	330	354	790	964				1337	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	22	30	239	437								
Volume Left	20	26	4	12								
Volume Right	2	4	6	80								
cSH	368	357	964	1337								
Volume to Capacity	0.06	0.08	0.00	0.01								
Queue Length 95th (ft)	5	7	0	1								
Control Delay (s)	15.4	16.0	0.2	0.3								
Lane LOS	C	C	A	A								
Approach Delay (s)	15.4	16.0	0.2	0.3								
Approach LOS	C	C										
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				39.2%	ICU Level of Service				A			
Analysis Period (min)				15								












Lanes, Volumes, Timings  
9: Ryder St & South Dr

2025 Build AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	1	8	6	3	10
Future Volume (vph)	11	1	8	6	3	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.987		0.943			
Flt Protected	0.957					0.988
Satd. Flow (prot)	1795	0	1447	0	0	1450
Flt Permitted	0.957					0.988
Satd. Flow (perm)	1795	0	1447	0	0	1450
Link Speed (mph)	25		25			25
Link Distance (ft)	269		157			797
Travel Time (s)	7.3		4.3			21.7
Confl. Peds. (#/hr)	32	32		32	32	
Confl. Bikes (#/hr)				2		
Peak Hour Factor	0.38	0.38	0.71	0.71	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	14%	8%	0%	22%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)			0	0	0	0
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	29	3	11	8	4	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	0	19	0	0	16
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	26.5%			ICU Level of Service A		
Analysis Period (min)	15					

















# HCM Unsignalized Intersection Capacity Analysis 9: Ryder St & South Dr

2025 Build AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	1	8	6	3	10
Future Volume (Veh/h)	11	1	8	6	3	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.38	0.38	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	29	3	11	8	4	12
Pedestrians	32		32			32
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	3		3			3
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	99	79			51	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	99	79			51	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			100	
cM capacity (veh/h)	848	928			1520	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	32	19	16			
Volume Left	29	0	4			
Volume Right	3	8	0			
cSH	855	1700	1520			
Volume to Capacity	0.04	0.01	0.00			
Queue Length 95th (ft)	3	0	0			
Control Delay (s)	9.4	0.0	1.9			
Lane LOS	A		A			
Approach Delay (s)	9.4	0.0	1.9			
Approach LOS	A					
Intersection Summary						
Average Delay		4.9				
Intersection Capacity Utilization		26.5%		ICU Level of Service		A
Analysis Period (min)		15				

Lanes, Volumes, Timings  
1: Appleton St & Appleton Pl & Massachusetts Ave

2025 Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	475	20	123	349	2	20	1	367	1	1	3
Future Volume (vph)	3	475	20	123	349	2	20	1	367	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	12	12	12	12	12	12
Grade (%)		0%			0%			-4%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.999			0.872			0.925	
Flt Protected					0.987			0.997			0.989	
Satd. Flow (prot)	0	1722	0	0	1699	0	0	1669	0	0	1738	0
Flt Permitted					0.987			0.997			0.989	
Satd. Flow (perm)	0	1722	0	0	1699	0	0	1669	0	0	1738	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			357			73			97	
Travel Time (s)		9.0			9.7			2.0			2.6	
Confl. Peds. (#/hr)	21		1	7		27	1		7	27		21
Confl. Bikes (#/hr)			2			2						
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.90	0.90	0.90	0.62	0.62	0.62
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	1%	3%	0%	0%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	8	8	8	8	8	8	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0						
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	3	511	22	140	397	2	22	1	408	2	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	536	0	0	539	0	0	431	0	0	9	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 87.8%

















ICU Level of Service E

Analysis Period (min) 15

# HCM Unsignalized Intersection Capacity Analysis










## 1: Appleton St & Appleton Pl & Massachusetts Ave

2025 Build PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	475	20	123	349	2	20	1	367	1	1	3
Future Volume (Veh/h)	3	475	20	123	349	2	20	1	367	1	1	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			-4%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.90	0.90	0.90	0.62	0.62	0.62
Hourly flow rate (vph)	3	511	22	140	397	2	22	1	408	2	2	5
Pedestrians		21			27			7			27	
Lane Width (ft)		14.0			14.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		2			3			1			3	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	426			540			1240	1241	556	1668	1251	446
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	426			540			1240	1241	556	1668	1251	446
tC, single (s)	4.1			4.1			*5.0	*5.0	*5.0	*5.0	*5.0	*5.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			*3.0	*3.0	*3.0	*3.0	*3.0	*3.0
p0 queue free %	100			86			92	100	39	97	99	99
cM capacity (veh/h)	1115			1027			288	286	667	70	283	736
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	536	539	431	9								
Volume Left	3	140	22	2								
Volume Right	22	2	408	5								
cSH	1115	1027	623	212								
Volume to Capacity	0.00	0.14	0.69	0.04								
Queue Length 95th (ft)	0	12	137	3								
Control Delay (s)	0.1	3.5	22.7	22.7								
Lane LOS	A	A	C	C								
Approach Delay (s)	0.1	3.5	22.7	22.7								
Approach LOS			C	C								
Intersection Summary												
Average Delay				7.9								
Intersection Capacity Utilization				87.8%	ICU Level of Service				E			
Analysis Period (min)				15								
* User Entered Value												

Lanes, Volumes, Timings  
2: Appleton St & Appleton Pl










2025 Build PM Peak Hour

						
Lane Group	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (vph)	3	25	11	133	363	6
Future Volume (vph)	3	25	11	133	363	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12
Grade (%)	-4%		0%		-4%	
Storage Length (ft)	0	0	0	0	0	0
Storage Lanes	1	0	1	0	1	0
Taper Length (ft)	25		25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.881		0.875		0.998	
Flt Protected	0.994		0.996		0.953	
Satd. Flow (prot)	1641	0	1626	0	1643	0
Flt Permitted	0.994		0.996		0.953	
Satd. Flow (perm)	1641	0	1626	0	1643	0
Link Speed (mph)	25		25		25	
Link Distance (ft)	178		73		363	
Travel Time (s)	4.9		2.0		9.9	
Confl. Peds. (#/hr)	20	18	9	11	11	20
Confl. Bikes (#/hr)						
Peak Hour Factor	0.65	0.65	0.84	0.84	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	2%	1%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)					0	0
Mid-Block Traffic (%)	0%		0%		0%	
Adj. Flow (vph)	5	38	13	158	403	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	43	0	171	0	410	0
Sign Control	Stop		Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	49.3%			ICU Level of Service A		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis

















## 2: Appleton St & Appleton Pl

2025 Build PM Peak Hour

						
Movement	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	3	25	11	133	363	6
Future Volume (Veh/h)	3	25	11	133	363	6
Sign Control	Stop		Free		Stop	
Grade	-4%		0%		-4%	
Peak Hour Factor	0.65	0.65	0.84	0.84	0.90	0.90
Hourly flow rate (vph)	5	38	13	158	403	7
Pedestrians	20		18		20	
Lane Width (ft)	11.0		12.0		12.0	
Walking Speed (ft/s)	3.5		3.5		3.5	
Percent Blockage	2		2		2	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	224	38	20		184	145
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	224	38	20		184	145
tC, single (s)	*5.0	*5.0	4.1		*5.0	*5.0
tC, 2 stage (s)						
tF (s)	*3.0	*3.0	2.2		*3.0	*3.0
p0 queue free %	99	97	99		55	99
cM capacity (veh/h)	921	1117	1581		899	996
Direction, Lane #	WB 1	SB 1	NE 1			
Volume Total	43	171	410			
Volume Left	0	13	403			
Volume Right	38	158	0			
cSH	1090	1581	900			
Volume to Capacity	0.04	0.01	0.46			
Queue Length 95th (ft)	3	1	60			
Control Delay (s)	8.4	0.6	12.3			
Lane LOS	A	A	B			
Approach Delay (s)	8.4	0.6	12.3			
Approach LOS	A		B			
Intersection Summary						
Average Delay			8.8			
Intersection Capacity Utilization			49.3%	ICU Level of Service	A	
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
3: Burton St/Forest St & Massachusetts Ave

















2025 Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	631	2	3	404	97	1	3	9	42	4	75
Future Volume (vph)	220	631	2	3	404	97	1	3	9	42	4	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.974			0.908			0.916	
Flt Protected		0.987						0.995			0.983	
Satd. Flow (prot)	0	1676	0	0	1800	0	0	1545	0	0	1711	0
Flt Permitted		0.987						0.995			0.983	
Satd. Flow (perm)	0	1676	0	0	1800	0	0	1545	0	0	1711	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		357			87			283			336	
Travel Time (s)		9.7			2.4			7.7			9.2	
Confl. Peds. (#/hr)	19		21			2	19		14	16		21
Confl. Bikes (#/hr)			2			3						1
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.60	0.60	0.60	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	9%	0%	0%	3%	2%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	0	0	0				0	0	0			
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	237	678	2	3	459	110	2	5	15	52	5	93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	917	0	0	572	0	0	22	0	0	150	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 97.9%	ICU Level of Service F											
Analysis Period (min) 15												

# HCM Unsignalized Intersection Capacity Analysis

## 3: Burton St/Forest St & Massachusetts Ave










2025 Build PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	631	2	3	404	97	1	3	9	42	4	75
Future Volume (Veh/h)	220	631	2	3	404	97	1	3	9	42	4	75
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.60	0.60	0.60	0.81	0.81	0.81
Hourly flow rate (vph)	237	678	2	3	459	110	2	5	15	52	5	93
Pedestrians		21			16			21			19	
Lane Width (ft)		14.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	588			701			1810	1768	716	1726	1714	554
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	588			701			1810	1768	716	1726	1714	554
tC, single (s)	4.1			4.1			*5.0	*5.0	*5.0	*5.0	*5.0	*5.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			*3.0	*3.0	*3.0	*3.0	*3.0	*3.0
p0 queue free %	75			100			98	96	97	65	97	86
cM capacity (veh/h)	964			887			119	142	569	149	151	666
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	917	572	22	150								
Volume Left	237	3	2	52								
Volume Right	2	110	15	93								
cSH	964	887	281	287								
Volume to Capacity	0.25	0.00	0.08	0.52								
Queue Length 95th (ft)	24	0	6	71								
Control Delay (s)	5.6	0.1	18.9	30.5								
Lane LOS	A	A	C	D								
Approach Delay (s)	5.6	0.1	18.9	30.5								
Approach LOS			C	D								
Intersection Summary												
Average Delay			6.1									
Intersection Capacity Utilization			97.9%		ICU Level of Service				F			
Analysis Period (min)			15									
* User Entered Value												



Lanes, Volumes, Timings  
4: Massachusetts Ave & West Dr











2025 Build PM Peak Hour

						
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	18	664	497	18	2	7
Future Volume (vph)	18	664	497	18	2	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	10	10
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.995		0.894	
Flt Protected		0.999			0.989	
Satd. Flow (prot)	0	1676	1764	0	1568	0
Flt Permitted		0.999			0.989	
Satd. Flow (perm)	0	1676	1764	0	1568	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		87	240		169	
Travel Time (s)		2.4	6.5		4.6	
Confl. Peds. (#/hr)					19	19
Confl. Bikes (#/hr)				3		
Peak Hour Factor	0.93	0.93	0.88	0.88	0.64	0.64
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0		
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	19	714	565	20	3	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	733	585	0	14	0
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 64.1%	ICU Level of Service C					
Analysis Period (min) 15						

# HCM Unsignalized Intersection Capacity Analysis

## 4: Massachusetts Ave & West Dr

2025 Build PM Peak Hour

						
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	18	664	497	18	2	7
Future Volume (Veh/h)	18	664	497	18	2	7
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.93	0.93	0.88	0.88	0.64	0.64
Hourly flow rate (vph)	19	714	565	20	3	11
Pedestrians		19	19			
Lane Width (ft)		12.0	14.0			
Walking Speed (ft/s)		3.5	3.5			
Percent Blockage		2	2			
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	585				1346	594
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	585				1346	594
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
p0 queue free %	98				99	98
cM capacity (veh/h)	1000				296	655
Direction, Lane #	EB 1	WB 1	SW 1			
Volume Total	733	585	14			
Volume Left	19	0	3			
Volume Right	0	20	11			
cSH	1000	1700	519			
Volume to Capacity	0.02	0.34	0.03			
Queue Length 95th (ft)	1	0	2			
Control Delay (s)	0.5	0.0	12.1			
Lane LOS	A		B			
Approach Delay (s)	0.5	0.0	12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			64.1%	ICU Level of Service		C
Analysis Period (min)			15			
* User Entered Value						










Lanes, Volumes, Timings  
5: Pine Ct & Massachusetts Ave

2025 Build PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↲	
Traffic Volume (vph)	664	3	2	518	1	1
Future Volume (vph)	664	3	2	518	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	12	12
Grade (%)	0%			0%	-4%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.932	
Flt Protected					0.976	
Satd. Flow (prot)	1608	0	0	1641	1587	0
Flt Permitted					0.976	
Satd. Flow (perm)	1608	0	0	1641	1587	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	240			134	415	
Travel Time (s)	6.5			3.7	11.3	
Confl. Peds. (#/hr)		8	8		8	8
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.92	0.92	0.90	0.90	0.50	0.50
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0		
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	722	3	2	576	2	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	725	0	0	578	4	0
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	CBD					
Control Type:	Unsignalized					
Intersection Capacity Utilization	51.4%			ICU Level of Service A		
Analysis Period (min)	15					










# HCM Unsignalized Intersection Capacity Analysis 5: Pine Ct & Massachusetts Ave

2025 Build PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	664	3	2	518	1	1
Future Volume (Veh/h)	664	3	2	518	1	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	-4%	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.50	0.50
Hourly flow rate (vph)	722	3	2	576	2	2
Pedestrians	8			8	8	
Lane Width (ft)	14.0			14.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			733		1320	740
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			733		1320	740
tC, single (s)			4.1		*5.0	*5.0
tC, 2 stage (s)						
tF (s)			2.2		*3.0	*3.0
p0 queue free %			100		99	100
cM capacity (veh/h)			861		311	566
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	725	578	4			
Volume Left	0	2	2			
Volume Right	3	0	2			
cSH	1700	861	401			
Volume to Capacity	0.43	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	14.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	14.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			51.4%	ICU Level of Service		A
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
6: Massachusetts Ave & Quinn Rd










2025 Build PM Peak Hour

						
Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	4	658	500	9	22	18
Future Volume (vph)	4	658	500	9	22	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	14	14	14	14
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.939	
Flt Protected					0.973	
Satd. Flow (prot)	0	1863	1726	0	1811	0
Flt Permitted					0.973	
Satd. Flow (perm)	0	1863	1726	0	1811	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		134	384		203	
Travel Time (s)		3.7	10.5		5.5	
Confl. Peds. (#/hr)	20			21	21	20
Confl. Bikes (#/hr)				7		
Peak Hour Factor	0.98	0.98	0.90	0.90	0.50	0.50
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	2%	0%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)			6	0		
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	4	671	556	10	44	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	675	566	0	80	0
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.7%			ICU Level of Service A		
Analysis Period (min)	15					

# HCM Unsignalized Intersection Capacity Analysis










## 6: Massachusetts Ave & Quinn Rd

2025 Build PM Peak Hour

						
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	4	658	500	9	22	18
Future Volume (Veh/h)	4	658	500	9	22	18
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.90	0.90	0.50	0.50
Hourly flow rate (vph)	4	671	556	10	44	36
Pedestrians		20	21		21	
Lane Width (ft)		12.0	14.0		14.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		2	2		2	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	587				1282	602
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	587				1282	602
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
p0 queue free %	100				86	94
cM capacity (veh/h)	975				313	634
Direction, Lane #	SE 1	NW 1	SW 1			
Volume Total	675	566	80			
Volume Left	4	0	44			
Volume Right	0	10	36			
cSH	975	1700	405			
Volume to Capacity	0.00	0.33	0.20			
Queue Length 95th (ft)	0	0	18			
Control Delay (s)	0.1	0.0	16.1			
Lane LOS	A		C			
Approach Delay (s)	0.1	0.0	16.1			
Approach LOS			C			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			52.7%	ICU Level of Service		A
Analysis Period (min)			15			
* User Entered Value						

Lanes, Volumes, Timings  
7: West Dr/Mill Brook Br & Quinn Access Rd

2025 Build PM Peak Hour

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	9	2	30	3	8	0
Future Volume (vph)	9	2	30	3	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	9	9
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.979		0.988			
Flt Protected	0.960					0.950
Satd. Flow (prot)	1607	0	1877	0	0	1624
Flt Permitted	0.960					0.950
Satd. Flow (perm)	1607	0	1877	0	0	1624
Link Speed (mph)	25		25			25
Link Distance (ft)	315		169			187
Travel Time (s)	8.6		4.6			5.1
Confl. Peds. (#/hr)	2	2		2	2	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.58	0.58	0.58	0.58	0.50	0.50
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	16	3	52	5	16	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	57	0	0	16
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 17.3%










ICU Level of Service A

Analysis Period (min) 15

# HCM Unsignalized Intersection Capacity Analysis

## 7: West Dr/Mill Brook Br & Quinn Access Rd

















2025 Build PM Peak Hour

						
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	9	2	30	3	8	0
Future Volume (Veh/h)	9	2	30	3	8	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.58	0.58	0.50	0.50
Hourly flow rate (vph)	16	3	52	5	16	0
Pedestrians	2		2			2
Lane Width (ft)	12.0		12.0			9.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	0		0			0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	90	58			59	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	90	58			59	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	100			99	
cM capacity (veh/h)	902	1010			1555	
Direction, Lane #	NW 1	NE 1	SW 1			
Volume Total	19	57	16			
Volume Left	16	0	16			
Volume Right	3	5	0			
cSH	917	1700	1555			
Volume to Capacity	0.02	0.03	0.01			
Queue Length 95th (ft)	2	0	1			
Control Delay (s)	9.0	0.0	7.3			
Lane LOS	A		A			
Approach Delay (s)	9.0	0.0	7.3			
Approach LOS	A					
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			17.3%	ICU Level of Service		A
Analysis Period (min)			15			



















Lanes, Volumes, Timings  
8: Forest St & Peirce St/Ryder St

2025 Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	2	13	1	3	4	299	5	2	99	6
Future Volume (vph)	8	1	2	13	1	3	4	299	5	2	99	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.979			0.980			0.998			0.993	
Flt Protected		0.963			0.966			0.999			0.999	
Satd. Flow (prot)	0	1732	0	0	1739	0	0	1870	0	0	1822	0
Flt Permitted		0.963			0.966			0.999			0.999	
Satd. Flow (perm)	0	1732	0	0	1739	0	0	1870	0	0	1822	0
Link Speed (mph)		25			25			20			25	
Link Distance (ft)		451			157			336			396	
Travel Time (s)		12.3			4.3			11.5			10.8	
Confl. Peds. (#/hr)	5		6	2		1	6		2	1		5
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.83	0.83	0.83	0.67	0.25	0.75	0.93	0.93	0.93	0.84	0.84	0.84
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	25%	1%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	10	1	2	19	4	4	4	322	5	2	118	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	0	0	27	0	0	331	0	0	127	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	29.9%											
Analysis Period (min)	15											
ICU Level of Service A												










# HCM Unsignalized Intersection Capacity Analysis 8: Forest St & Peirce St/Ryder St

2025 Build PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1	2	13	1	3	4	299	5	2	99	6
Future Volume (Veh/h)	8	1	2	13	1	3	4	299	5	2	99	6
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.83	0.83	0.83	0.67	0.25	0.75	0.93	0.93	0.93	0.84	0.84	0.84
Hourly flow rate (vph)	10	1	2	19	4	4	4	322	5	2	118	7
Pedestrians	6			2			6			5		
Lane Width (ft)	11.0			11.0			12.0			11.0		
Walking Speed (ft/s)	3.5			3.5			3.5			3.5		
Percent Blockage	1			0			1			0		
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	475	468	134	468	470	332	131				329	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	475	468	134	468	470	332	131				329	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.3				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.4				2.2	
p0 queue free %	98	100	100	96	99	99	100				100	
cM capacity (veh/h)	488	490	911	498	489	710	1317				1240	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	13	27	331	127								
Volume Left	10	19	4	2								
Volume Right	2	4	5	7								
cSH	526	520	1317	1240								
Volume to Capacity	0.02	0.05	0.00	0.00								
Queue Length 95th (ft)	2	4	0	0								
Control Delay (s)	12.0	12.3	0.1	0.1								
Lane LOS	B	B	A	A								
Approach Delay (s)	12.0	12.3	0.1	0.1								
Approach LOS	B	B										
Intersection Summary												
Average Delay				1.1								
Intersection Capacity Utilization				29.9%	ICU Level of Service				A			
Analysis Period (min)				15								










Lanes, Volumes, Timings  
9: Ryder St & South Dr

2025 Build PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	1	6	3	0	10
Future Volume (vph)	11	1	6	3	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.986		0.955			
Flt Protected	0.957					
Satd. Flow (prot)	1793	0	1507	0	0	1402
Flt Permitted	0.957					
Satd. Flow (perm)	1793	0	1507	0	0	1402
Link Speed (mph)	25		25			25
Link Distance (ft)	269		157			797
Travel Time (s)	7.3		4.3			21.7
Confl. Peds. (#/hr)	6	5		6	5	
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.62	0.62	0.59	0.59	0.42	0.42
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	25%	0%	22%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)			0	0	0	0
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	18	2	10	5	0	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	15	0	0	24
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 16.7%	ICU Level of Service A					
Analysis Period (min) 15						

# HCM Unsignalized Intersection Capacity Analysis 9: Ryder St & South Dr

2025 Build PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	1	6	3	0	10
Future Volume (Veh/h)	11	1	6	3	0	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.59	0.59	0.42	0.42
Hourly flow rate (vph)	18	2	10	5	0	24
Pedestrians	6		6			5
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		1			0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	48	24			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	48	24			21	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	100			100	
cM capacity (veh/h)	955	1048			1599	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	20	15	24			
Volume Left	18	0	0			
Volume Right	2	5	0			
cSH	964	1700	1599			
Volume to Capacity	0.02	0.01	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	8.8	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.8	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		3.0				
Intersection Capacity Utilization		16.7%		ICU Level of Service		A
Analysis Period (min)		15				



Appendix I: “Mill Building” Tenant Occupancy Data





The information below is taken from the ALTA Survey, dated February 8, 2021, and the Town Assessor's database property card information from the assessor's website.

1    **WORKBAR**

<b>FLOOR/LEVEL</b>	<b>GSF</b>	<b>NOTES</b>
1st Floor	5,835	Based on ALTA survey, dated February 8, 2021.
2nd Floor	5,835	Based on ALTA survey, dated February 8, 2021.
<b>TOTAL GSF</b>	<b>11,670</b>	

7    **BUILDING 1**

<b>FLOOR/LEVEL</b>	<b>GSF</b>	<b>NOTES</b>
1st Floor (FFL)	6,734	
2nd Floor (SFL)	4,848	
3rd Floor (TFL)	4,848	
4th Flr (Upper Floor (UFL))	4,848	
<b>TOTAL GSF</b>	<b>21,278</b>	

15    **BUILDING 2**

<b>FLOOR/LEVEL</b>	<b>GSF</b>	<b>NOTES</b>
1st Floor (FFL)	4,237	
2nd Floor (SFL)	3,674	
3rd Floor (TFL)	3,538	
<b>TOTAL GSF</b>	<b>11,449</b>	

22    **BUILDING 3**

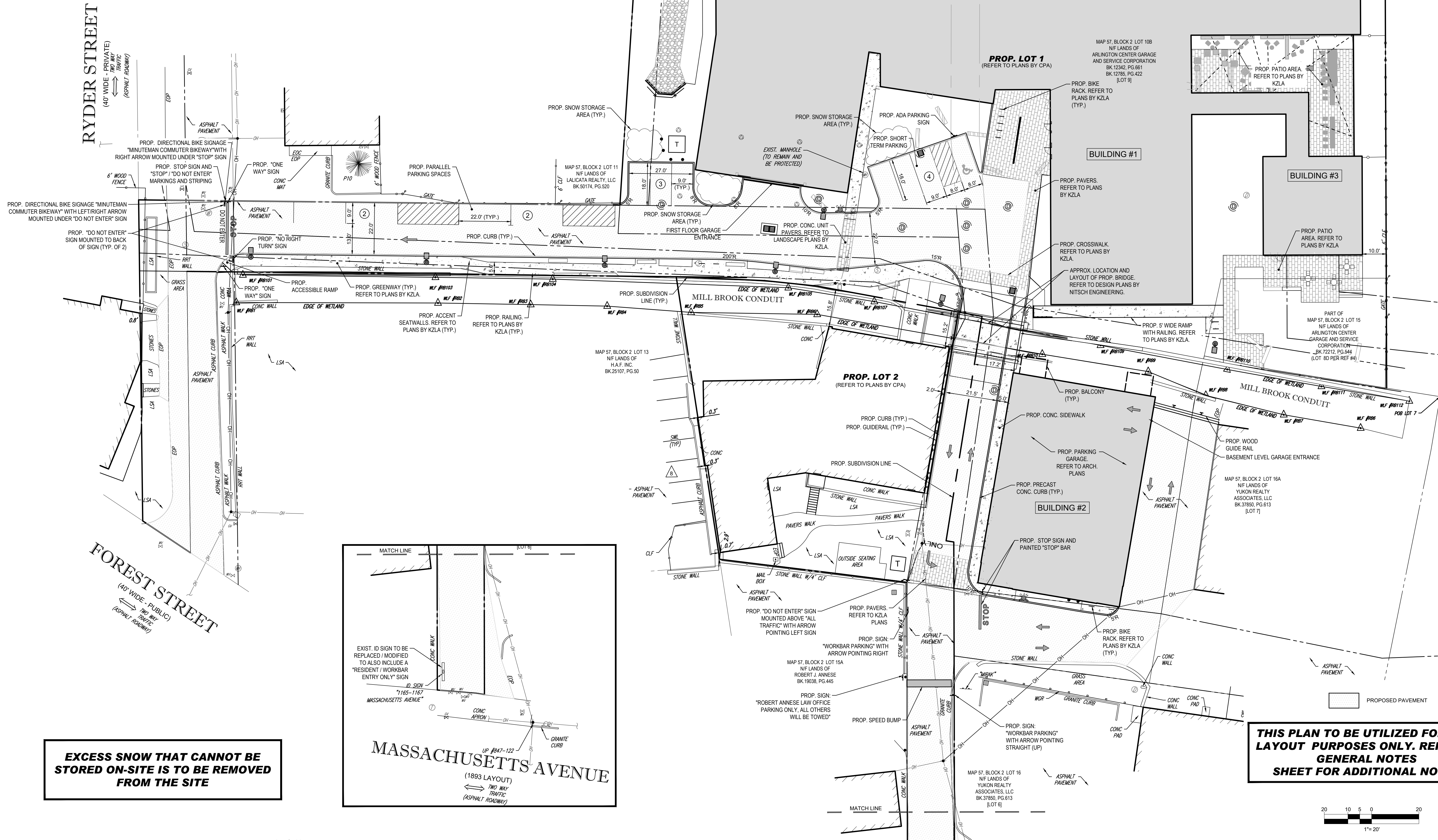
<b>FLOOR/LEVEL</b>	<b>GSF</b>	<b>NOTES</b>
1st Floor	1,748	
<b>TOTAL GSF</b>	<b>1,748</b>	

27    **INFILL BUILDINGS adj to BUILDING 1**

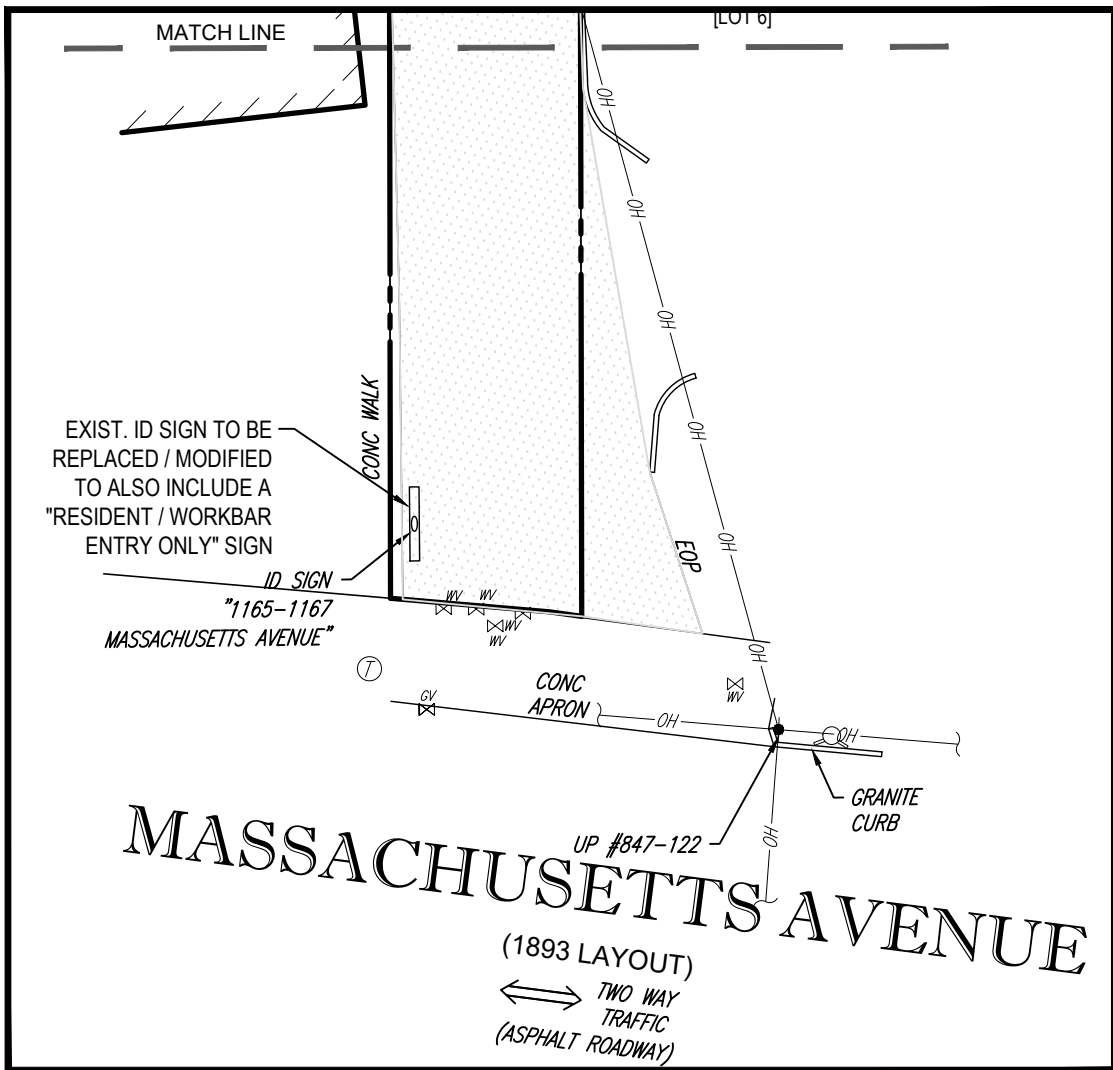
<b>FLOOR/LEVEL</b>	<b>GSF</b>	<b>NOTES</b>
1st Floor	8,832	Based on Town property card. Building 3 area is broken out above.
<b>TOTAL GSF</b>	<b>8,832</b>	

32    **GRAND TOTAL GSF    54,977**

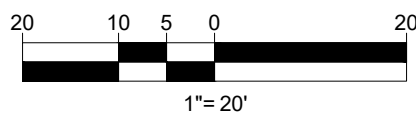




EXCESS SNOW THAT CANNOT BE  
STORED ON-SITE IS TO BE REMOVED  
FROM THE SITE



THIS PLAN TO BE UTILIZED FOR SITE  
LAYOUT PURPOSES ONLY. REFER TO  
GENERAL NOTES  
SHEET FOR ADDITIONAL NOTES



BOHLER

SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

TM

BOHLER

REVISIONS				
REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	3/10/20	REVISED BUILDING 2 & GRADING	BPB	JMJ
2	06/15/20	SITE PLAN & GRADING	JMJ	JMJ
3	07/15/20	CONSERVATION COMMISSION	JMJ	JMJ
4	08/21/20	CONSTRUCTION PHASING	JMJ	JMJ
5	10/05/20	ZBA SUBMITTAL PROGRESS SET	JMJ	JMJ
6	04/01/21	ZBA COMMENT RESPONSE	RMM	RMM
7	04/13/21	UPDATED SIGNAGE	CFD	RMM

811

Know what's below.  
Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

PERMIT SET

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PROJECT No.: W191330  
DRAWN BY: AWP  
CHECKED BY: JMJ  
DATE: 02/17/2020  
CAD L.D.: W191330-CVL-7-130 UNITS

PROJECT:

PROPOSED SITE  
PLAN DOCUMENTS

FOR

1165R MASS MA  
PROPERTY LLC

PROPOSED  
RESIDENTIAL DEVELOPMENT  
1165R MASSACHUSETTS AVE.  
MIDDLESEX COUNTY  
TOWN OF ARLINGTON, MA  
MAP #57, BLOCK #2, LOT #10B  
AND PART OF LOT #15

BOHLER

352 TURNPIKE ROAD  
SOUTHBOROUGH, MA 01772  
Phone: (508) 480-9900  
Fax: (508) 480-9080  
www.BohlerEngineering.com

J.G. SWERLING

PROFESSIONAL ENGINEER  
MASSACHUSETTS LICENSE No. 41692  
NEW HAMPSHIRE LICENSE No. 14695  
MAINE LICENSE No. 13816  
CONNECTICUT LICENSE No. 38785  
RHODE ISLAND LICENSE No. 11425

SHEET TITLE:

SITE  
LAYOUT  
PLAN

SHEET NUMBER:

C-301

REVISION 7 - 04/13/21



**KRATTENMAKER O'CONNOR & INGBER P.C.**

ATTORNEYS AT LAW

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BOSTON, MASSACHUSETTS 02109  
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May 4, 2021

CHARLES G. KRATTENMAKER, JR.  
MARY WINSTANLEY O'CONNOR  
KENNETH INGBER

OF COUNSEL: RAYMOND SAYEG

Christian Klein, Chairperson  
Arlington Zoning Board of Appeals  
51 Grove Street  
Arlington, MA 02476

Re: 1165R Massachusetts Avenue, Arlington, MA (the "Property") Meeting with  
Neighborhood Representatives

Dear Chairperson Klein:

On April 1, 2021, my client 1165 Mass MA Property LLC and its traffic engineer, Bryan Zimolka from Nitsch Engineering (collectively referred to as the "Applicant"), met with three representatives from the neighborhood to discuss potential improvements to Ryder Street from the exit of the Property onto Ryder Street to Forest Street (hereinafter referred to as the "South Side of Ryder Street"). The Applicant believes it was a productive meeting.

This letter is intended to convey the improvements the Applicant is prepared to agree to. They include the following:

- Repaving the South Side of Ryder Street from the Property exit to the intersection of Forest and Ryder Streets.
- Repaving the existing sidewalk to create a continuous accessible sidewalk on the southside of Ryder Street along the side of Ryder Street that abuts 9 Ryder Street to Forest Street.
- Installing a "tabletop", so-called, at the intersection of the exit to the Property driveway and Ryder Street as a traffic calming measure.
- Installing wheelchair ramps and painted crosswalks to make the southside of Ryder Street to Forest Street accessible.
- Providing for parking along the right side of the Ryder Street exit from the property for parking. This onsite parking is intended to deter visitor parking on Ryder Street.
- Recommending to the Town that it install a sign on the Town-owned portion of Ryder Street, which abuts 9 Ryder Street, that restricts parking as follows: "Parking for Ryder Street Residents only".

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**KRATTENMAKER O'CONNOR & INGBER P.C.**

Christian Klein, Chairperson  
May 4, 2021  
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- Charging residents for onsite parking. Parking fees will not be bundled with monthly rent charges
- Inserting into resident leases, inter alia, provisions that there is: (a) no right turn out of the Ryder Street exit to the Property; and (b) no resident parking on Ryder Street and Beck Road for residents of the Property. A breach of these provisions would constitute a lease termination event.
- Having onsite property management available to receive neighborhood telephone calls concerning any residents violating the parking restrictions referred to above.

The neighbors and the Applicant discussed Ryder Street being delineated as a street with two dedicated lanes of travel. However, the encroachment of the front yards of 2 Ryder Street and 22 Forest Street into the South Side of Ryder Street has reduced the width of Ryder Street. The other factor is that Ryder Street residents park on the South Side of Ryder Street (the portion owned by the Town of Arlington through a taking) adjacent to 9 Ryder Street.

The Applicant is not recommending any action to remove the parking spaces by the Town nor is it seeking to have the paved area of the roadway widened by requiring that the residents of 2 Ryder or 22 Forest Streets remove their encroachments. However, these circumstances were not of the Applicant's making and given that the revised traffic impact study performed by Nitsch Engineering indicates that utilizing the Ryder Street exit to the Property as egress only for residents, results in no additional trips during peak hours and suggests that dramatic changes to either the configuration of Ryder Street or the Applicant's use of south Ryder Street is not warranted.

The neighbors have repeatedly expressed during public hearings and our neighborhood meeting that a significant source of concern is the traffic resulting from the occupants of north Ryder Street. The reports are that certain commercial vehicles travel at an excessive speed for the area and that they park and block the Minuteman Bikeway. The Town, not the Applicant, has the authority to address these concerns.

The Applicant does not control to the north of Ryder Street. The north of Ryder Street is likewise a private way. It is the neighbors' and Applicant's understanding that certain of the property to the north of Ryder Street is on the market. The Applicant suggests that whomever purchases the property could be directed to install a handicap accessible sidewalk, extending what the Applicant intends to install to the south of Ryder Street.

The Applicant previously submitted a comprehensive list of Transportation Demand Management Measures, which it has expanded upon (collectively referred to as "TDM"). Copies of the initial and the expanded TDM measures are enclosed.

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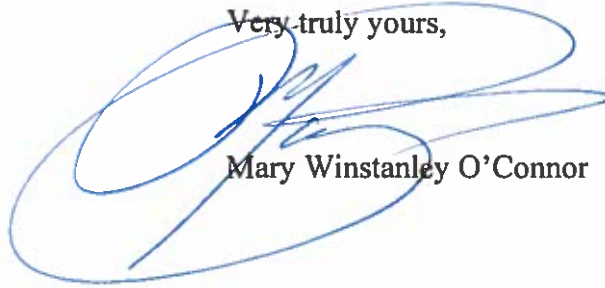
**KRATTENMAKER O'CONNOR & INGBER P.C.**

Christian Klein, Chairperson  
May 4, 2021  
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The Applicant has endeavored in good faith to address the concerns of the neighbors and is prepared to make the improvements referenced above, notwithstanding the fact that the Applicant's proposed use is not increasing the traffic flow from the Ryder Street exit point from the Property.

The Applicant appreciates the thoughtful approach of the neighbors' representatives and the interactive process that has occurred. The Applicant also is appreciate of the commitment and efforts of the Zoning Board.

Very truly yours,



Mary Winstanley O'Connor

MWO/ccg  
Enclosures  
6926

cc: Kelly Lynema, Senior Planner (via email)  
Patrick Hanlon, Vice Chairperson (via email)  
Jenny Raitt, Director of Planning and Economic Development (via email)  
Rick Vallarelli, Administrator (via email)  
Marta J. Nover, Vice President (via email)  
Paul Haverty, Esq. (via email)  
William P. McGrath, PE (via email)  
Laura Krause (via email)  
Greg Lucas (via email)  
Douglas Heim, Esq. (via email)  
Alex Tee (via email)

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# 1165R Mass Ave Apartments

## Initial Transportation Demand Management Measures (as listed in TIR)

- **Orientation Packets:** The Proponent will provide orientation packets to new residents and tenants containing information on site access and circulation; and available transportation choices, including transit routes/schedules and nearby vehicle sharing locations and bicycle facilities. On-site management will work with residents and tenants as they move in to help facilitate transportation for new arrivals.
- **Bicycle Accommodation:** The Proponent will provide interior and exterior bicycle storage in secure, sheltered areas for residents, as well as repair and maintenance stations. Subject to necessary approvals, public-use bicycle racks for visitors will be placed near building entrances and must adhere to the Town of Arlington's regulations.
- **Electric Vehicle Charging:** The Proponent will explore the feasibility of providing electric vehicle charging stations within the garages.
- **Shared-Car Services:** The Proponent will explore the feasibility of providing a shared car service (e.g., Zip Car) on-site to help reduce the need for residents to own a vehicle.
- **Transportation Coordinator:** The Proponent will designate a transportation coordinator to oversee transportation issues including parking, service and loading, and deliveries and will work with residents as they move in to raise awareness of public transportation, bicycling, and walking opportunities.
- **Project Web Site:** The web site will include transportation-related information for residents, workers, and visitors.
- **Transportation Monitoring Program:** The Proponent will implement a transportation monitoring program that will periodically monitor the TDM program through a Town of Arlington survey. The building TDM program shall be revised as necessary to update the elements as new trip reduction measures become available and/or certain programs become obsolete or ineffective.

# 1165R Mass Ave Apartments

## Expanded Transportation Demand Management Measures

- Each new resident will be provided information as to transit alternatives, how parking will work and travel restrictions to and from the project site, ie one way in and out, etc.
- \$100 gift certificate per apartment upon lease execution to local bike store
- 5% of parking spaces to provide EV charging with ability to add more upon demand
- All resident parking will be charged at market rates for reserved and unreserved spaces. Parking costs will be unbundled from other lease costs.
- Provide continuous accessible sidewalk to project along the Mill Brook to Ryder Street/Forest Street/Mass Avenue
- On-site transportation director with active parking, biking and transportation management
- Short-term site parking for ride share, deliveries, visitors/prospective tenants including accessible parking
- Interior and exterior bike parking including cargo bikes
- Bike repair and maintenance stations
- All parking for resident and WorkBar tenant controlled with stickers/placards
- Shared parking with WorkBar accommodated within project parking (40 spaces during weekdays/10 spaces during evenings and weekends)